

# JVC

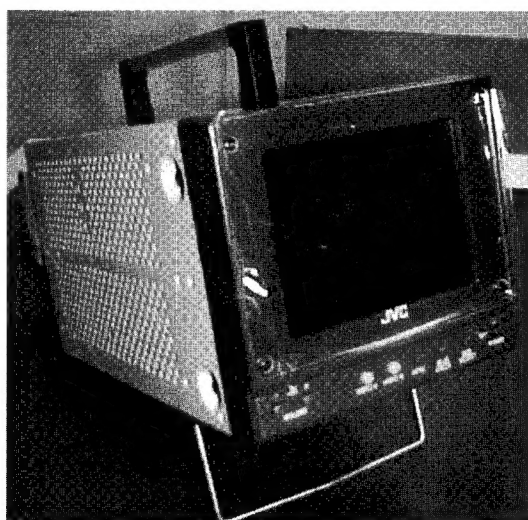
## SERVICE MANUAL

### LCCS VIDEO MONITOR

BASIC CHASSIS

Q1B1

# TM-L450TU



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# SPECIFICATIONS

## Basic Specifications

Type	LCCS Video Monitor
Power Input	AC100V~240V 50/60Hz
Power Consumption	DC 19V:2A (AC Adapter) DC 12V:3.5A (Battery)
Speaker	5cm Round Type 0.2W
Scanning Frequency	H :15.734KHz(NTSC) :15.625KHz(PAL) V :60Hz(NTSC) :50Hz(PAL)
Horizontal Resolution	400 lines
Colour System	NTSC/PAL
RF Reception	VHF:2-13
Channel	UHF:14-69
Picture Tube	4.5" measured diagonally, black and white (Colour Filter and Liquid crystal Shutter)
Dimensions(W × H × D)	146mm x 181.3mm x 291.8 mm
Length of Power Cord	1.8m
High Voltage	12KV
Focus Voltage	660V
Screen Voltage	41.3V

## Antenna Terminal

VHF · UHF	F type 75 $\Omega$
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## Input and Output Terminal

VIDEO A	BNC Connector × 2 (Input, Output)
VIDEO B	BNC Connector × 2 (Input, Output)
AUDIO IN	RCA PIN × 2 (A, B)

## Others

Remote in	3.5mm stereo min jack × 1
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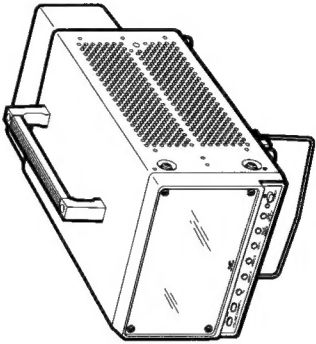
OPERATING INSTRUCTIONS



TM-L450TU LCCS VIDEO MONITOR

LCCS VIDEO MONITOR

TM-L450TU



**For Customer Use:**  
Enter below the Serial No. which is located on the bottom of the cabinet. Retain this information for future reference.

Model No. : TM-L450TU  
Serial No. : \_\_\_\_\_



JVC PROFESSIONAL PRODUCTS COMPANY  
DIVISION OF US JVC CORP.  
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JVC CANADA INC.  
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LCT0505-001A  
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INSTRUCTIONS

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Thank you for purchasing this JVC LCCS video monitor.  
Before using, read and follow all instructions carefully to take full advantage of the monitor's capabilities.  
Retain these instructions for future reference.  
\* LCCS = Liquid Crystal Color Shutter

## IMPORTANT SAFETY PRECAUTIONS



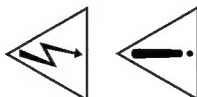


**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN

**CAUTION:** To reduce the risk of electric shock,  
do not remove cover (or back).  
No user serviceable parts inside.  
Refer servicing to qualified service personnel.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



**WARNING:**  
TO PREVENT FIRE OR SHOCK HAZARDS,  
DO NOT EXPOSE THIS APPLIANCE TO  
RAIN OR MOISTURE.

**CAUTION:**  
TO INSURE PERSONAL SAFETY,  
OBSERVE THE FOLLOWING RULES  
REGARDING THE USE OF THIS UNIT.

1. Operate only from the power source specified on the unit.
  2. Avoid damaging the AC plug and power cord.
  3. Avoid improper installation and never position the unit where good ventilation is unattainable.
  4. Do not allow objects or liquid into the cabinet openings.
  5. In the event of trouble, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the cover. Changes or modifications not approved by JVC could void the warranty.
- \* When you don't use this Appliance for a long period of time, be sure to disconnect both the power plug from the AC outlet and antenna for your safety.

## IMPORTANT SAFEGUARDS

### CAUTION:

**Please read and retain for your safety.**  
Electrical energy can perform many useful functions. This Appliance has been engineered and manufactured to assure your personal safety. But improper use can result in potential electrical shock or fire hazards. In order not to defeat the safeguards incorporated in this Appliance, observe the following basic rules for its installation, use and servicing.  
And also follow all warnings and instructions marked on your Appliance.

### INSTALLATION

- 1 Your Appliance is equipped with a grounding-type AC line plug (three-blade type), a plug having a third (grounding) pin.

(GROUNDING-TYPE)



This plug will only fit into a grounding-type power outlet. This is a safety feature.

Should you be unable to insert the plug into the outlet, contact your electrician to replace your outlet. Do not defeat the safety purpose of the grounding-type plug.

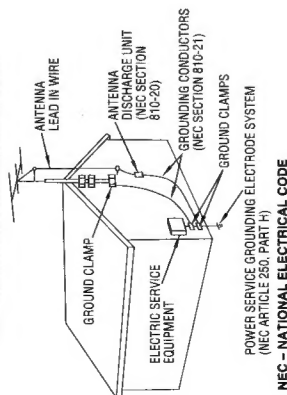
- 2 Operate the Appliance only from a power source as indicated on the Appliance or refer to the operating instructions for this information. If you are not sure of the type of power supply to your home, consult your Appliance dealer or local power company. For battery operation, refer to the operating instructions.

- 3 Overloaded AC outlets and extension cords are dangerous, and so are frayed power cords and broken plugs. They may result in a shock or fire hazard. Call your service technician for replacement.
- 4 Do not allow anything to rest on or roll over the power cord, and do not place the Appliance where power cord is subject to traffic or abuse. This may result in a shock or fire hazard.
- 5 Do not use this Appliance near water — for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near swimming pool, etc.
- 6 If an outside antenna is connected to the Appliance, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection requirements for the grounding electrode.

(continued on the next page)

- 7 An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

**EXAMPLE OF ANTENNA GROUNDING  
AS PER NATIONAL ELECTRICAL CODE**



- 8 Appliances are provided with ventilation openings in the cabinet to allow heat generated during operation to be released.

Therefore:

- Never block the bottom ventilation slots of a portable Appliance by placing it on a bed, sofa, rug, etc.
- Never place an Appliance in a "built-in" enclosure unless proper ventilation is provided.
- Never cover the openings with a cloth or other material.
- Never place the Appliance near or over a radiator or heat register.

- 9 To avoid personal injury:

- Do not place an Appliance on a sloping shelf unless properly secured.
- Use only a cart or stand recommended by the Appliance manufacturer.
- Do not try to roll a cart with small casters across thresholds or deep pile carpets.
- Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.

#### USE

- 10 Caution children about dropping or pushing objects into the Appliance through cabinet openings. Some internal parts carry hazardous voltages and contact can result in a fire or electrical shock.

- 11 Unplug the Appliance from the wall outlet before cleaning. Do not use liquid or an aerosol cleaner.

- 12 Never add accessories to an Appliance that has not been designed for this purpose. Such additions may result in a hazard.

- 13 For added protection of the Appliance during a lightning storm or when the Appliance is to be left unattended for an extended period of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to product due to lightning storms or power line surges.

- 14 An Appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the Appliance and cart combination to overturn.



- 17 When replacement parts are required, have the service technician verify in writing that the replacement parts he uses have the same safety characteristics as the original parts. Use of manufacturer's specified replacement parts can prevent fire, shock, or other hazards.

- 18 Upon completion of any service or repairs to this Appliance, please ask the service technician to perform the safety check described in the manufacturer's service literature.

- 19 When an Appliance reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the Appliance.

- 20 Note to CATV system installer.  
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

#### SERVICE

- 15 Unplug this Appliance from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- A. When the power cord or plug is damaged or frayed.
- B. If liquid has been spilled into the Appliance.
- C. If the Appliance has been exposed to rain or water.
- D. If the Appliance does not operate normally by following the operating instructions. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the Appliance to normal operation.
- E. If the Appliance has been dropped or damaged in any way.
- F. When the Appliance exhibits a distinct change in performance — this indicates a need for service.

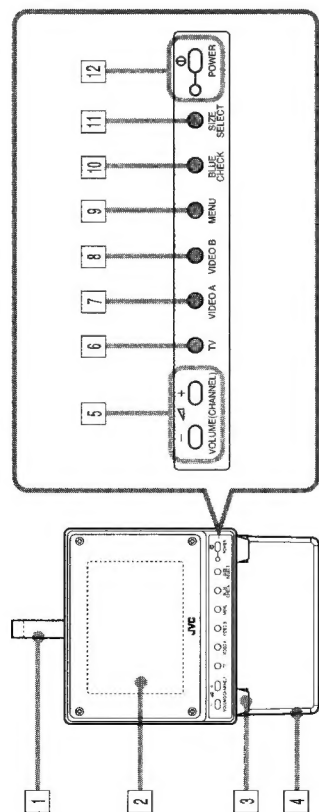
#### SCREEN BURN

- Try to avoid displaying still images or extremely bright images on the screen for an extended period of time. If left on screen for too long the image will be permanently etched onto the CRT — a phenomenon known as "screen burn". Screen burn is not a problem when displaying moving pictures during video playback.

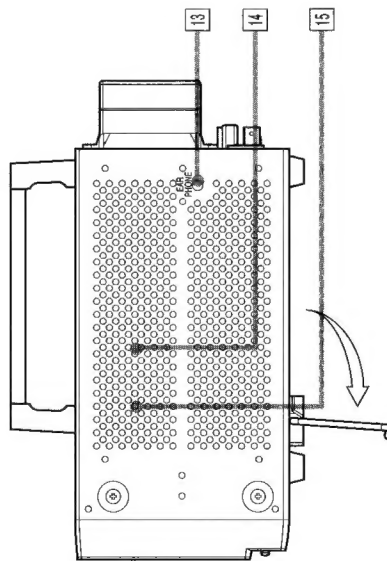
# CONTROLS AND FEATURES

## PRODUCT: FRONT & RIGHT VIEW

### FRONT VIEW



### RIGHT VIEW



### FRONT VIEW

- 1 Carrying Handle**  
Used to carry the monitor.  
Can be removed when the monitor is mounted in a rack.
- 2 Screen**  
A removable shield protecting the liquid crystal shutter is provided.
- 3 Feet**  
Can be removed when the monitor is mounted in a rack.
- 4 Stand**  
To use the stand, pull it out to about 94°. The monitor will be tilted about 18°.  
Can be removed when the monitor is mounted in a rack.  
\* DO NOT push down on the monitor from above or place heavy objects on it when the stand is pulled out.

- 5 VOLUME (CHANNEL) +/- Buttons**
  - Usually used as VOLUME +/- buttons to adjust the volume.
  - For about 8 seconds after the TV button is pressed (while the TV button is blinking in green), they act as CHANNEL +/- buttons for changing TV channels.

- 6 TV Button**  
Press this button to watch TV.  
The button blinks in green when it is pressed. While it is blinking, you can change channels with the CHANNEL +/- buttons.  
If you want to adjust the volume while the TV button is blinking, press the TV button again so that the button lights in green, then adjust the volume with the VOLUME +/- buttons.  
The TV button lights in green when TV is selected.

- 7 VIDEO A Button**  
Press this button to select the video signal input to the VIDEO A terminal and the audio signal input to the AUDIO IN A terminal.  
The button lights in green when VIDEO A is selected.

- 8 VIDEO B Button**  
Press this button to select the video signal input to the VIDEO B terminal and the audio signal input to the AUDIO IN B terminal.  
The button lights in green when VIDEO B is selected.

### 9 MENU Button

Press this button to access the menu for performing settings and adjustments on the monitor.  
The selected item displayed on the menu changes each time this button is pressed.

### 10 BLUE CHECK Button

Press this button to use the blue check function.

The blue check function helps make the CHROMA and PHASE settings more accurate.

### 11 SIZE SELECT Button

Press this button to change the screen size.  
The screen size changes each time this button is pressed.

### 12 POWER Switch/Indicator

Press this switch to turn the power ON or OFF.  
The POWER indicator lights in green when the power is ON.

### RIGHT VIEW

### 13 Earphone Terminal

Stereo minijack output terminal.  
(Actual output is monaural.)

### 14 Built-in Speaker

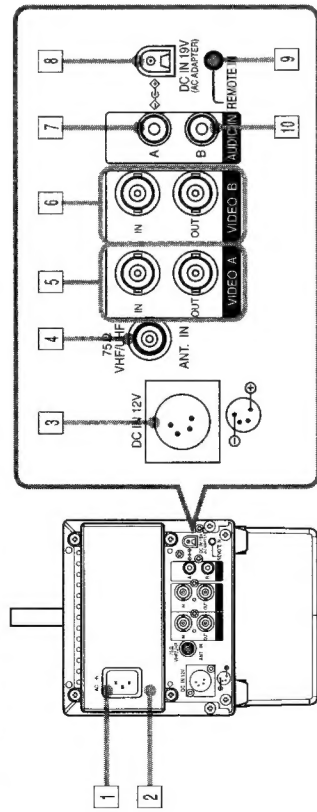
A built-in speaker is located in the right panel when the monitor is viewed from the front.  
(When earphones are connected to the earphone terminal, no sound is output from the speaker.)

### 15 Intake Fan

DO NOT cover the intake fan or ventilation slot as this could cause the monitor to overheat, resulting in a fire or malfunction.

# CONTROLS AND FEATURES (cont'd)

## PRODUCT: REAR VIEW

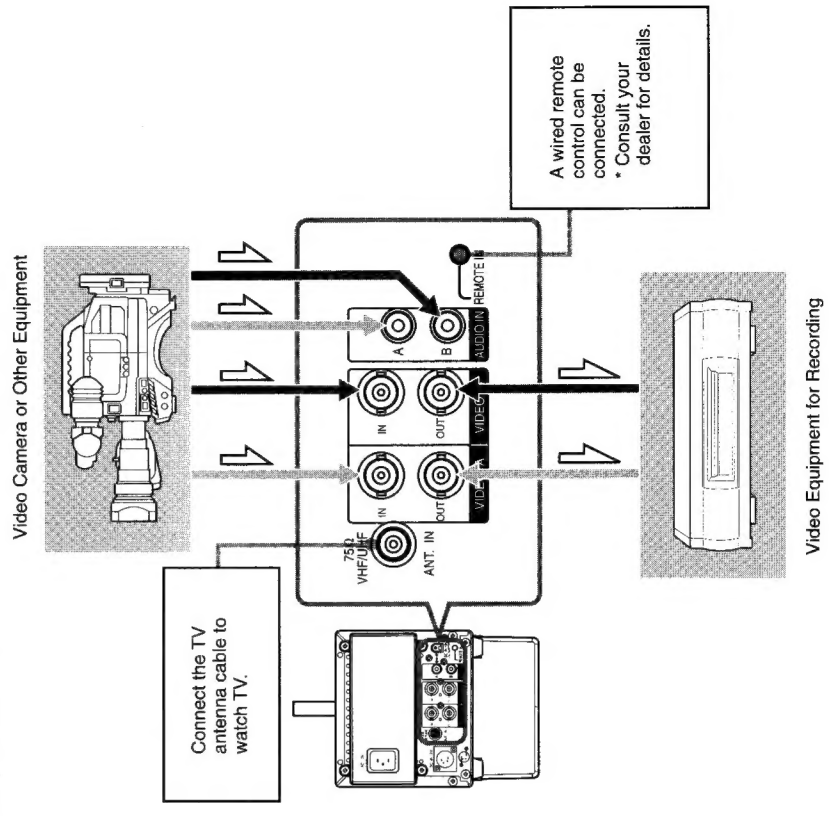


- 1 AC IN (AC Power Input) Terminal**  
Power input terminal.  
Connect the provided power cord to the terminal.
- 2 AC Adapter**  
Can be removed when a commercial DC power supply (DC 12 V) is used.
- 3 DC IN 12 V (DC Power Input) Terminal**  
Connect a commercial DC power supply.  
(Consult your dealer for usable DC power supplies.)
- 4 75 Ω VHF/UHF (TV Antenna) Terminal**  
Connect the TV antenna cable to watch TV.
- 5 VIDEO A Terminals**  
BNC video signal input (IN) and output (OUT) terminals. The output terminal is bridge-connected (auto termination).  
**IN** : Connect to the composite video signal output terminal of a video camera, etc.  
**OUT** : Connect to the composite video signal input terminal of a VCR, etc.
- 6 VIDEO B Terminals**  
BNC video signal input (IN) and output (OUT) terminals. The output terminal is bridge-connected (auto termination).  
**IN** : Connect to the composite video signal output terminal of a video camera, etc.  
**OUT** : Connect to the composite video signal input terminal of a VCR, etc.
- 7 AUDIO IN A Terminal**  
RCA-pin monaural audio signal input terminal.  
Connect it to the audio signal output terminal of the video camera, etc. connected to the VIDEO A input (IN) terminal.
- 8 DC IN 19 V Terminal (Exclusively for Provided AC Adapter)**  
Connect the provided AC adapter to this terminal.  
\* DO NOT use any AC adapter other than the one provided.
- 9 REMOTE IN (Remote Control Input) Terminal**  
Mini-jack input terminal.  
A wired remote control can be connected to this terminal.  
(Consult your dealer for details.)
- 10 AUDIO IN B Terminal**  
RCA-pin monaural audio signal input terminal.  
Connect it to the audio signal output terminal of the video camera, etc. connected to the VIDEO B input (IN) terminal.

# BASIC CONNECTION EXAMPLES

- Before connecting your system, make sure that all units are turned off.
- If you are not connecting any equipment to one of the bridged video output (VIDEO OUT) terminals, be sure NOT to connect any cables to the terminal as this will cause the terminating resistance switch to open (auto terminate function).
- DO NOT connect a piece of equipment to the same pair of video input (VIDEO IN) and video output (VIDEO OUT) terminals.
- Also refer to the instructions of the equipment being connected.

- ➡ : VIDEO A Connection Example
- ↑ : VIDEO B Connection Example
- ↙ : Signal Flow





# PREPARING THE POWER SUPPLY

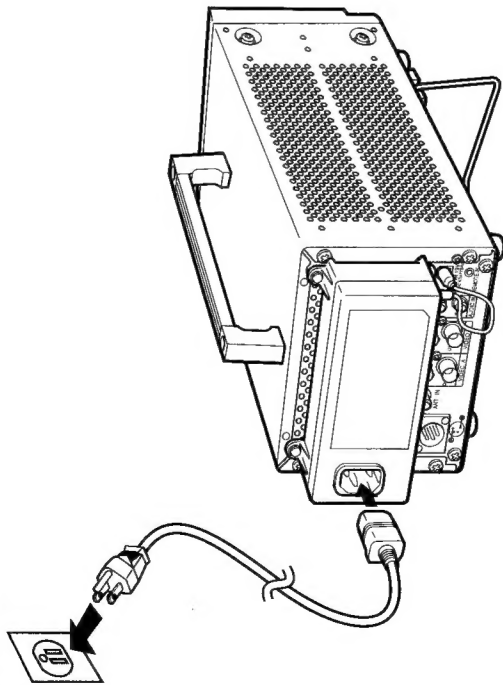
## Precautions

- Use one of the following power supplies:
- AC power supply (100 V AC – 240 V AC, 50 Hz/60 Hz): Use the provided power cord.
  - DC power supply (12 V DC): Use any brand of external DC battery pack (commercial) or other DC power supply.

## INDOOR USAGE (AC Power Supply)

Connect the provided power cord to the AC IN (AC power input) terminal and an AC outlet.

- When AC power supply is used, the power from the DC IN 12 V (DC power input) terminal is automatically cut off.



### Note:

- DO NOT use any AC adapter other than the one provided, otherwise it may cause a malfunction.

## Using Outside North America

A different AC power cord will be required.

- The AC power cord provided with this monitor can only be used with AC 120 V, 50 Hz/60 Hz (North America). To use this monitor outside North America, you will need to get a different AC power cord that matches the voltage and/or power plug used in that country.

## OUTDOOR USAGE (DC Power Supply)

Connect any commercial brand of external DC battery pack or other DC power supply to DC IN 12 V (DC power input) terminal with the exclusive power cord.

### Connection example: using an external DC battery pack

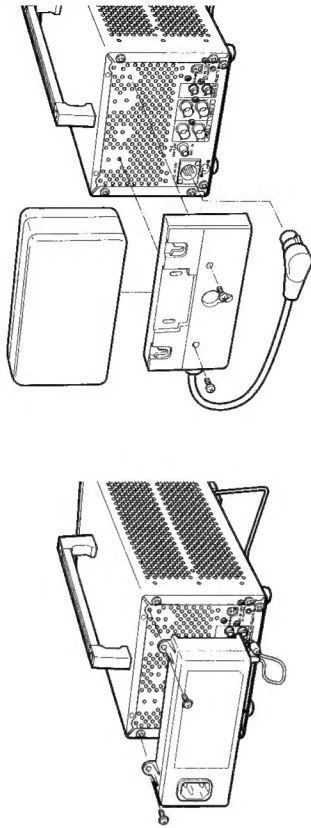
Before performing the following, be sure to unplug the power cord.

The DC battery pack fits into the attachment holes on the back of the monitor.

- The screw holes for fixing the DC battery are M4 size and have a depth of 12 mm. The fixing screws must be less than 12 mm long.

## 1 Remove the AC Adapter.

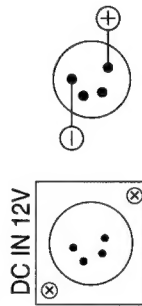
## 2 Attach the DC Battery Pack.



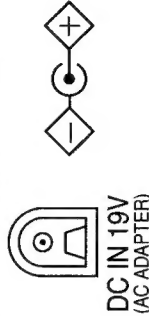
### Notes:

- Do not leave the monitor connected to a battery via the DC IN 12 V (DC power input) terminal for long periods when the monitor is not in use.
- A slight electrical current is passed to the battery protection circuit even when the power is turned off, which consumes battery power.
- Consult your dealer for usable DC 12 V power supplies.
- Bauer, PAG or other commercial brand of external DC battery pack can be used.
- Consult your dealer for details.

## ■ Electrical Polarity of DC IN 12 V (DC Power Input) Terminal



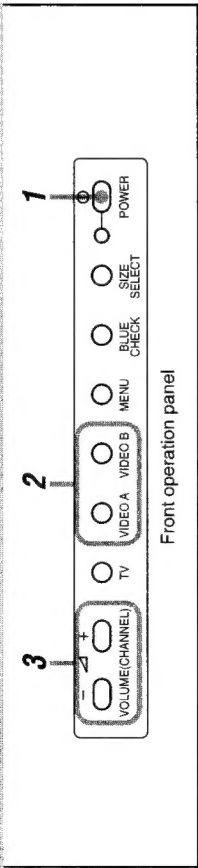
## ■ Electrical Polarity of DC IN 19 V (Exclusively for AC Adapter Input) Terminal





BASIC OPERATIONS

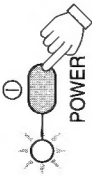
MONITORING THE PICTURE



Precautions

- Connect video components properly to the connection terminals on the rear of the monitor. (☞ pages 8 and 9)

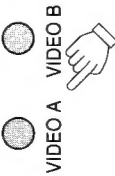
1 Press the power button to turn the power ON.



The power indicator lights in green.

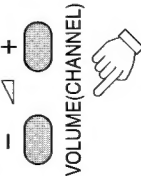
- To turn the power OFF, press the power button again.

2 Select a video input with the VIDEO A or VIDEO B button.



The button pressed lights in green.

3 Adjust the volume with the VOLUME +/- buttons.



Screen indication



POWER Indicator

The status of the POWER indicator varies depending on the following conditions:

Unit	Power OFF
Lights in green	Power ON, usual operation
Lights in orange	Low voltage from DC power supply (battery, etc.)
Lights in red *1	Battery protection circuit active
Blinks in green	Power save function active

\*1: The color of the POWER indicator does not show the exact status of the battery. Depending on the battery type, the power may be cut off even before the POWER indicator lights in orange/red. This is due to characteristics of the battery or the operation of the battery protection circuit, and is not a malfunction. If this occurs, recharge the battery.

Screen Indication

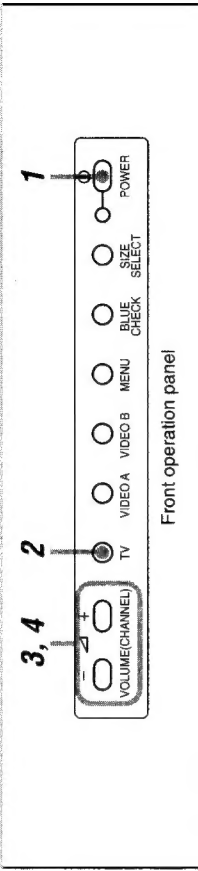
The screen indication disappears about 8 seconds after button operation.

Unsuitable Environments for Viewing

- Watching the monitor in a room that is too dark can damage your eyes. Keep the room properly lit.
- Watching the monitor for long periods can also damage your eyes. Be sure to take occasional breaks.

- The picture may appear distorted depending on the environment around the monitor. If it does, DO NOT use the monitor as it could damage your eyes.

WATCHING TV



Precautions

- Connect the TV antenna cable. (☞ page 9)
- Set TV channels. (☞ pages 14, 15 and 17)

1 Press the power button to turn the power ON.



The power indicator lights in green.

- To turn the power OFF, press the power button again.

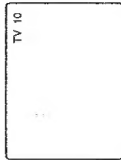
2 Press the TV button to select TV.



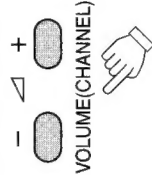
The TV button blinks in green for about 8 seconds.

(After 8 seconds, the TV button lights in green.)

Screen indication



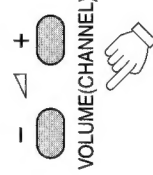
3 While the TV button is blinking in green, select the TV station (channel) you want to watch.



Screen indication



4 After the TV button finishes blinking and lights in green, adjust the volume with the VOLUME +/- buttons.



Screen indication

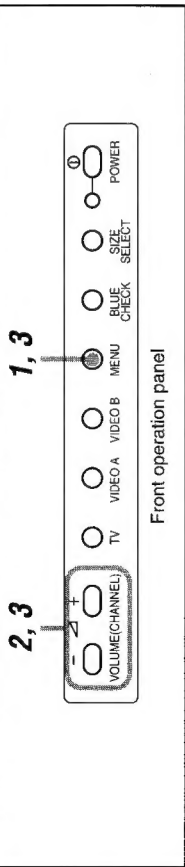


If you want to adjust the volume immediately after selecting TV:

Press the TV button again. The button stop blinking and then lights in green. After that, you can adjust the volume with the VOLUME +/- buttons.

# SETTINGS AND ADJUSTMENTS

## BASIC MENU OPERATION



**1 Press the MENU button to select the desired item to adjust (set).**

The selected item changes each time the MENU button is pressed. The currently selected item is displayed on the monitor.

Screen Indications

① Item

② Adjusting (setting) value

③ Help indication

CONTRAST → BRIGHTNESS → SHARPNESS → CHROMA → PHASE → COLOR SYSTEM → POWER SAVE → COLOR SW → CH STATUS → CH SEARCH START → CH SKIP ON → CH RESET ON → .....

\* Some items may not be displayed depending on which input mode is selected. Items that are not displayed cannot be adjusted (set).

-

+

VOLUME(CHANNEL)

**2 Adjust (set) the item selected in procedure 1 with the VOLUME (CHANNEL) +/- buttons.**

\* When adjusting, the help indicator disappears. It is displayed again 2 seconds after adjustment is complete.

CONTRAST: +24

SELECT: MENU  
ADJUST: VOLUME +/-

Ex. Adjusting CONTRAST

**3 Repeat procedures 1 and 2 to adjust (set) more items.**

\* Refer to MENU CONTENTS on the next page for the name of each item.

## MENU CONTENTS

You can adjust (set) the following items on the menu screen. Each adjusted (set) value is automatically memorized.  
The values inside [ ] are the factory presets.

**1 CONTRAST (Picture Contrast)**  
Adjusts the picture contrast. Decreasing the value lowers the contrast, and increasing the value raises it.  
Adjustable range: -30 to +30 [0]

**2 BRIGHTNESS (Picture Brightness)**  
Adjusts the picture brightness.  
Decreasing the value makes the picture darker, and increasing the value makes it brighter.  
Adjustable range: -30 to +30 [0]

**3 SHARPNESS (Picture Sharpness)**  
Adjusts the picture sharpness.  
Decreasing the value makes the picture softer, and increasing the value makes it more sharp.  
Adjustable range: -30 to +30 [0]

**4 CHROMA (Picture Chroma)**  
Adjusts the picture chroma.  
Decreasing the value makes the picture lighter, and increasing the value makes it deeper.  
Adjustable range: -30 to +30 [0]

**5 PHASE (Picture Phase)**  
Adjusts the picture phase.  
Decreasing the value makes the picture more reddish, and increasing the value makes it more greenish.  
Adjustable range: -30 to +30 [0]

\* PHASE can be adjusted only with NTSC video signals.  
\* PHASE is not displayed when PAL is selected.

**6 COLOR SYSTEM (Color System)**  
Displays the color system (NTSC or PAL) used by the video equipment.

\* COLOR SYSTEM is not displayed when TV is selected.

**7 POWER SAVE (Power Save)**  
With the power save function set to ON (active), the monitor automatically enters standby mode when no video signal is input. When the power save function is active, the POWER indicator blinks in green. When a video signal is input, the power save function becomes inactive and the monitor is restored to normal operation. Pressing any buttons on the front operation panel also sets the power save function to inactive. [OFF]

\* The power save function becomes active when no video signal is input for over 30 seconds.

**8 COLOR SW**  
Turns the picture into black and white for checking the white balance. [ON]

The following items are displayed only when TV is selected:

**9 CH STATUS (Channel Status)**  
With CH STATUS set to OFF (inactive), the TV channel is not displayed when it is selected. [ON]

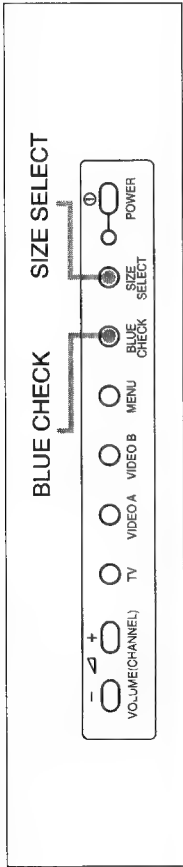
**10 CH SEARCH START (Initiate Channel Search)**  
The monitor automatically searches for broadcast stations (VHF/UHF) it can receive and memorizes them.  
(Also refer to SETTING TV CHANNELS on page 17.)

\* The monitor memorizes channels in ascending order.  
\* When you move the monitor into an area that receives different channels, perform CH SEARCH START again.

**11 CH SKIP ON (Channel Skip ON)**  
Deletes a channel set in CH SEARCH [10]. Select the channel to be deleted and perform CH SKIP ON.

**12 CH RESET ON (Channel Reset ON)**  
Deletes all channels set in CH SEARCH [10]. After performing channel reset, all TV channels (VHF: 2 - 13 / UHF: 14 - 69) can be tuned.

# SETTINGS AND ADJUSTMENTS (cont'd)



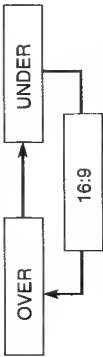
## SCREEN SIZE ADJUSTMENTS

Adjust the screen size to get the desired picture.



**Press the SIZE SELECT button.**

The screen size changes in the following order each time the SIZE SELECT button is pressed.



OVER	suitable for monitoring a picture with a normal aspect ratio of 4:3
UNDER	can monitor an entire picture with a normal aspect ratio of 4:3 by reducing its size
16:9	suitable for monitoring a picture with an aspect ratio of 16:9

## When using the screen mode adjustment function:

- This monitor has a screen mode adjustment (SIZE SELECT) function. When a screen mode is selected that does not match the aspect ratio of the TV program or other video source you want to watch, the picture may appear different from the original.
- If you place this monitor in a public space (e.g. coffee shop, hotel lobby, etc.) for commercial purposes or for public exhibition, and if you use a screen mode adjustment (SIZE SELECT) function on the video image, it may be a violation of copyright law.

## BLUE CHECK FUNCTION

The blue check function cuts the red and green signal and displays only the blue signal.

The blue check function enables you to adjust CHROMA (picture chroma) or PHASE (picture phase) easily.

\* PHASE can only be adjusted with NTSC video signals.

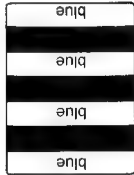


**Press the BLUE CHECK button.**

The blue check function switches ON (active) or OFF (inactive) each time the BLUE CHECK button is pressed.

## Adjusting CHROMA (picture chroma) or PHASE (picture phase) with the blue check function:

- 1 Input a standard color bar (NTSC or PAL) signal to the VIDEO A IN or VIDEO B IN terminal at the rear of the monitor.
- 2 Press the VIDEO A or VIDEO B button to display the standard color bars.
- 3 Press the BLUE CHECK button to turn the blue check function ON (active).



(continued on the next page)

## SETTING TV CHANNELS

This monitor is factory-preset to tune all VHF (2 to 13) and UHF (14 to 69) TV channels.

- To perform the following, press the TV button to select TV.

When you want to reset the memorized TV channels, perform CH SEARCH START (initiate channel search) from the menu screen (refer to pages 14 and 15). The monitor automatically searches for broadcasting stations (VHF/UHF) and memorizes them.

You can also delete channels you do not want to watch. Select the channel to be deleted and perform CH SKIP ON (channel skip ON) from the menu screen (refer to pages 14 and 15).

\* Channels deleted by CH SKIP ON (channel skip ON) cannot be tuned again. If you want to tune them, perform CH RESET ON (channel reset ON) from the menu screen to tune all VHF (2 to 13) and UHF (14 to 69) TV channels.

\* In areas where the radio wave reception weak, searching for TV channels will not function well. In this case, perform CH RESET ON (channel reset ON) from the menu screen to tune all VHF (2 to 13) and UHF (14 to 69) TV channels.

## 4 Adjust CHROMA (picture chroma) or PHASE (picture phase).

**When an NTSC color bar signal is input:**

- ① Adjust CHROMA (picture chroma) so that the blue bars on the left and right side of the screen have the same brightness.
- ② Adjust PHASE so that the two blue bars at the center of the screen have the same brightness.
- ③ Repeat procedure 1 and 2 so that all four blue bars on the screen have the same brightness.

**When a PAL color bar signal is input:**

Adjust CHROMA (picture chroma) so that the blue bars on the left and right side of the screen have the same brightness.

\* Refer to BASIC MENU OPERATION on page 14 for the adjustment procedure.

## 5 After adjustment is complete, press the BLUE CHECK button again to turn the blue check function OFF (inactive).

TROUBLESHOOTING

Before requesting repair, check the following points.

Problems	Points to be checked	Measures (remedy)
No power supply.	Is the power plug loosened or disconnected? Is the battery charged properly? (when a DC power supply is used)	Firmly insert the power plug. Charge the battery or replace the charged battery (refer to the battery charger you are using).
No picture with the power on.	Is the signal output from the connected equipment? Is the input signal selected correctly? Is the video signal cable disconnected?	Set the connected equipment correctly. Select the correct input. Connect the video signal cable firmly.
No sound.	Is the audio signal output from the connected equipment? Is the volume set to minimum? Is the audio signal cable disconnected?	Connect the audio signal cable correctly. Adjust the volume properly. Connect the audio signal cable firmly.
Picture is shaking.	Is the monitor close to a motor, transformer or other device generating a strong magnetic field? Has COLOR SW been set to OFF?	Move the monitor away from the device until the picture stops shaking. Set COLOR SW to ON in the menu.
No colors, wrong colors, or dark picture.	Has the picture control setting (CONTRAST, BRIGHTNESS, CHROMA or PHASE) been changed?	Adjust each setting to the standard value [0].
Some parts of the picture are distorted.	Is the monitor close to a speaker or magnet? Did you move a speaker or magnet close to the monitor?	Keep speakers and magnets away from the monitor.
There are black parts on the top and bottom of the screen, and both horizontal sides of the picture is indented.	Is the screen size set to 16:9?	Set the screen size to OVER or UNDER.

(continued on the next page)

Problems	Points to be checked	Measures (remedy)
The screen size is small.	Is the screen size set to UNDER?	Set the screen size to OVER.
There is no TV reception.	Is an antenna connected to the monitor? Was the monitor moved to an area that receives different channels after CH SEARCH START (initiate channel search) was performed?	Connect the TV antenna cable. Perform CH SEARCH START each time the monitor is moved to an area that receives different channels so that the monitor can memorize the new broadcast stations. Otherwise, perform CH RESET ON (channel reset ON) to tune all TV channels.

There may not be a solution to the following problems, although adjusting the antenna or taking measures against interfering equipment may improve the situation somewhat.

The screen appears snowy and noise is heard. (Snow)

- Is the antenna connected properly?
- Has the antenna cable been cut or loosened?
- Has the antenna orientation been changed or is the antenna broken?

The image is displayed two or three times on the monitor. (Ghosting)

- This may be caused by mountains or buildings. Also, if the broadcast antenna is located nearby, the TV transmission the monitor receives directly from it may affect the picture.

Spots are displayed and noise is heard. (Interference)

- This may be caused by interfering radio waves generated by dryers, automobiles, motorcycles or fluorescent lights.

Stripes are displayed and noise is heard. (Radio Interference)

- This may be caused by radio interference generated by radio stations, personal computers, AV equipment or microwave ovens.

The following are not malfunctions:

- The monitor emits a strange sound when the room temperature changes suddenly. This is only a problem if an abnormality appears on the screen as well.
- If two or more monitors are operated next to each other, their images may shake or be distorted. This phenomenon is due to mutual interference; it is not a malfunction. Move the monitors away from each other until the interference disappears or turn the power off on any monitor that is not being used.
- If a magnet or speaker is placed close to the monitor, the picture may shake. This is caused by the magnetic effect and is not a malfunction.
- When the monitor is turned ON, the sound of a running motor may be heard. This is the cooling fan and is not a malfunction.
- When playing back a video tape, the upper edge of the picture may be distorted. This is caused by skew distortion and is not a malfunction.
- Vertical stripes may occur on a dark picture. This is caused by quantization noise (noise which occurs when a picture is digitized) and is not a malfunction.

# CHARACTERISTICS OF LCCS VIDEO MONITOR SYSTEM

## ■ PRINCIPLE BEHIND LCCS VIDEO MONITOR OPERATION

The LCCS Video Monitor is a combination of a black-and-white cathode-ray tube and liquid crystal color shutter (LCCS), which are used together to reproduce color images. The video signal input to the monitor is demodulated into RGB primary color signals which are then stored in the field memory. Signals in the field memory are read three times faster than the input video signal is, and are displayed on the black-and-white cathode-ray tube in the order of R, G and B. (Three images are displayed during one field.) Color filters on the liquid crystal color shutter change according to the displayed primary color signal, transforming the black-and-white images into R, G and B primary color images. Because of the phenomenon known as persistence of vision, the R, G and B primary color images appear as a single color image to the human eye.

## ■ FEATURES OF LCCS VIDEO MONITOR

### • High Contrast

Thanks to its low permeability, the liquid crystal color shutter (LCCS) does not reflect outside light as much, enabling it to reproduce high-contrast images even in direct sunlight.

### • High Resolution

The use of a black-and-white cathode-ray tube (which has no picture elements) and a liquid crystal color shutter (LCCS) allows it to display images at high resolution.

### • No Magnetic Interference

Unlike with color cathode-ray tubes, irregular color does not occur on the display because the monitor does not have any color elements.

### • No Moire Patterns

Moire patterns (interference fringes) do not occur because the monitor does not have any color elements.

## ■ THE FOLLOWING ARE NOT MALFUNCTIONS:

- Picture hue changes depending on the angle from which the monitor is viewed. This is due to normal characteristics of the liquid crystal color shutter.
  - Two horizontal stripes are displayed on the upper and lower side of the picture. This is due to the structure of the liquid crystal color shutter.
  - Simple color image is displayed for an instant. This is due to normal characteristics of the LCCS video monitor.
  - Patterns such as spots are displayed when the monitor is turned ON or OFF. This is due to normal characteristics of the liquid crystal color shutter.
  - The color of characters or images seem to be shifted. This is due to normal characteristic of the LCCS video monitor.
- When images combined with a Macrovision copy protection signal or jittery images from a VCR, etc. are displayed on the monitor, their color may appear to be shifted.

# SPECIFICATIONS

Type	: LCCS video monitor
Color System	: NTSC/PAL
RF Reception Channels	: VHF: 2 - 13, UHF: 14 - 69
Picture Tube	: 4.5" measured diagonally, black and white
Effective Screen Size	: Width : 3-3/4" (94.2 mm) Height : 2-13/16" (70.7 mm) Diagonal : 4-1/2" (114.3 mm)
Video Inputs	: 2 line inputs, composite video, BNC connector x 4, 1 V(p-p), 75 Ω Bridge connection possible, 75 Ω auto termination
Audio Inputs	: 2 line inputs, monaural, RCA-pin connector x 2, 0.5 V (rms) high-impedance
REMOTE IN Input	: 1 line input, minijack connector
Built-in Speaker	: 2" (5 cm) round x 1, 0.2 W output
Antenna Terminals	: VHF/UHF compatible, 75 Ω, F connector
Environmental Conditions	: Operating temperature: 0°C - 40°C (32°F - 104°F) Operating humidity: 20% - 80% (non-condensing)
Power Requirements	: 100 V AC - 240 V AC 50 Hz/ 60 Hz or 12 V DC
Power Consumption	: 2 A (DC 19 V) (using an AC adapter) 3.5 A (DC 12 V) (using a battery)
Weight	: 7.48 lbs. (3.4 kg) (including AC adapter) 6.82 lbs. (3.1 kg) (not including AC adapter)
Dimensions (W x H x D)	: 5-3/4" x 7-3/16" x 11-1/2" (146 mm x 181.3 mm x 291.8 mm) * Including AC adapter, carrying handle, feet and stand (stored) (power cord not included)
Provided Accessories	: AC power cord [5.91 ft (1.8 m)] x 1 AC adapter [attached to monitor] x 1

## Notes about Magnets

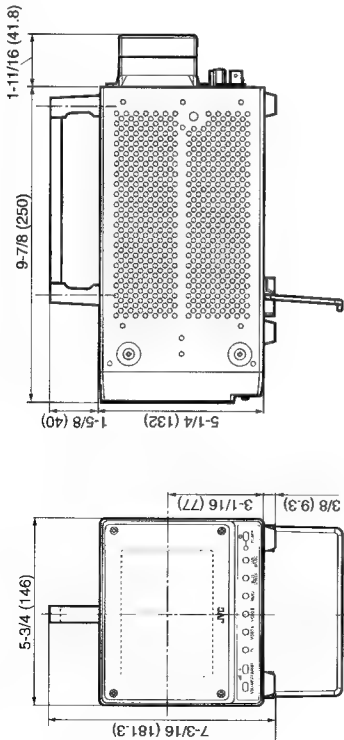
- DO NOT place the following close to the monitor: magnets, speakers, electric clocks, devices or toys which use a magnet, medical devices which use a magnet, or any other products which generate a magnetic field. Doing so may cause the picture to be distorted by their magnetic effect. Also, DO NOT place the monitor close to a high-voltage power line or transformer.
- If an external speaker is placed close to the monitor, the picture may be distorted. In this case, use a shielded speaker.

- \* Dimensions and weight are approximate.
- \* E. & O.E. Design and specifications are subject to change without notice.
- \* Illustrations used in this manual have been exaggerated, abbreviated or compounded for explanatory purposes only. The appearance of the actual product may differ slightly.

SPECIFICATIONS (cont'd)

■ Dimensions

Unit : inch (mm)



# SAFETY PRECAUTIONS

- The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
- Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (Δ) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
- Use isolation transformer when hot chassis.**  
The chassis and any sub-chassis contained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.
- Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**  
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (↘) side GND and EARTH : (⊕) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.  
If above note will not be kept, a fuse or any parts will be broken.
- If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
- The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
- Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
- When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

## 10. Isolation Check

### (Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

### (1) Dielectric Strength Test

The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.

(... Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)

This method of test requires a test equipment not generally found in the service trade.

### (2) Leakage Current Check

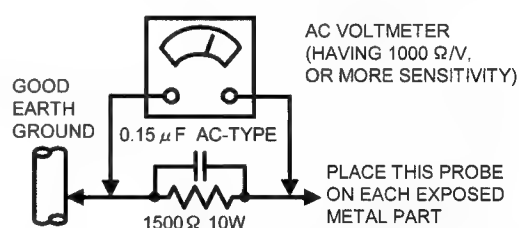
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

### ● Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).

However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



## 11. High voltage hold down circuit check.

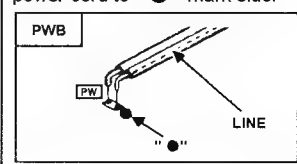
After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.

See item "How to check the high voltage hold down circuit".

This mark shows a fast operating fuse, the letters indicated below show the rating.



POWER CORD REPLACEMENT WARNING.  
Connecting the line side of power cord to "●" mark side.





# SPECIFIC SERVICE INSTRUCTION

## DISASSEMBLY PROCEDURE

### AC adapter

1. Take out 4 screws and remove the AC adapter.

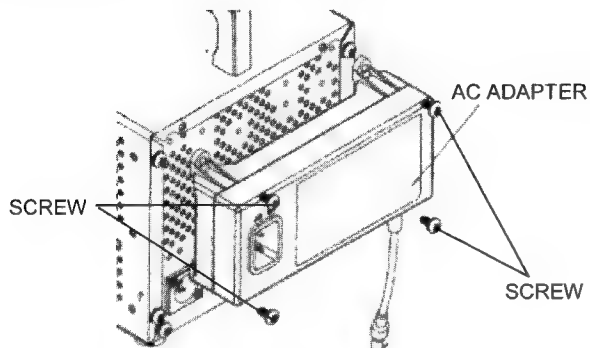


Fig1

### Handle

1. Take out 2 screws and remove the handle.

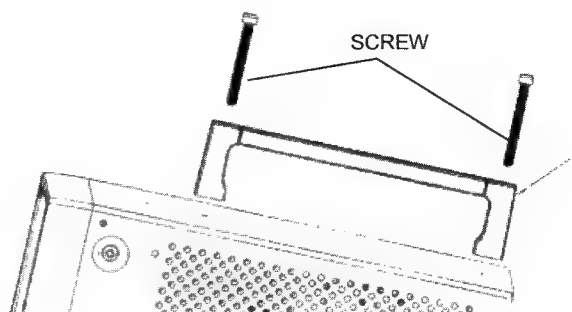


Fig2

### External cover

1. Remove the AC adapter.
2. Take out 8 screws A (see Figs. 3 and 4).
3. Grasp the handle and shift the cover slightly rearward. Gently spread the sides of the cover outward (Fig. 5) and raise the cover upward to remove it.

### Remark

Set the cover as shown in Fig. 6. Gently press the lower parts of the cover sides inward and press the cover forward.

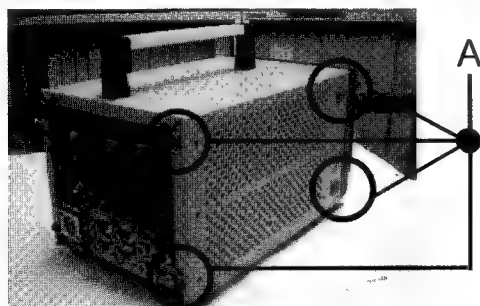


Fig.3

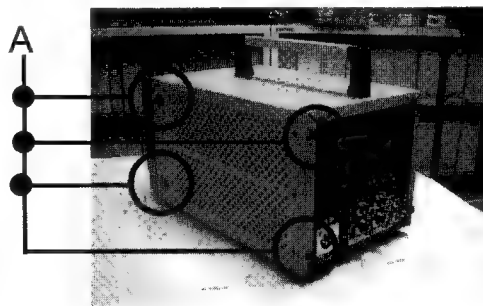


Fig.4

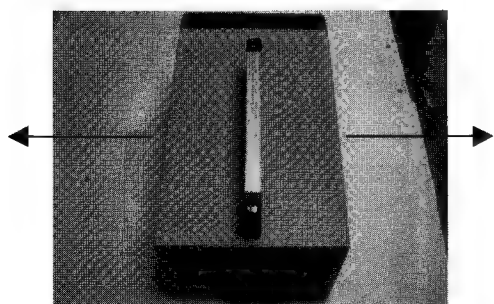


Fig.5

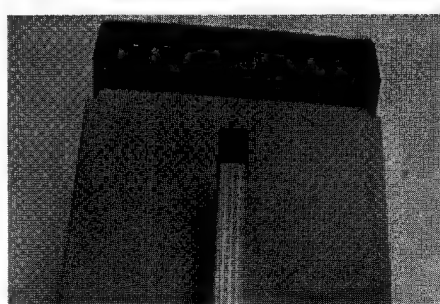


Fig.6

### Speaker case assembly

1. Remove the external cover.
2. Take out 4 screws (note 2 types) and remove the speaker case assembly.

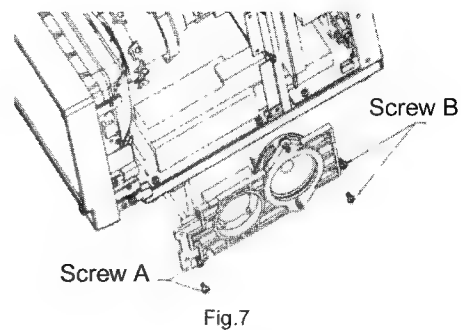


Fig.7

### CRT unit

1. Remove the speaker case assembly.
2. Take out 2 screws B.
3. Raise the CRT module upward and shift it forward to remove.

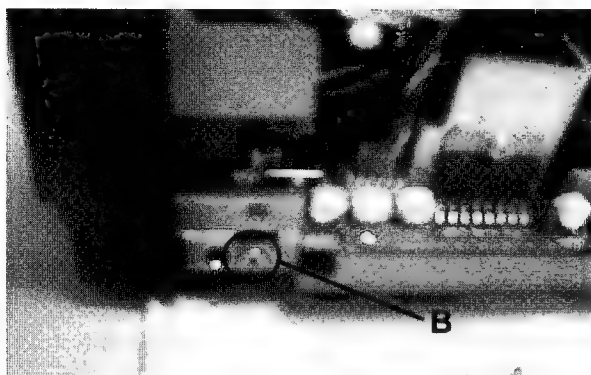


Fig.8

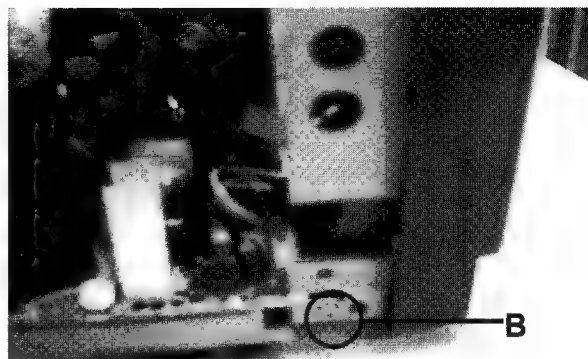


Fig.9

### Rear cover (terminal board)

1. Remove the external cover.
2. Take out 2 large size screws, 3 medium size screws, and the Remote In washer.  
Removing the 2 small size screws is not necessary.

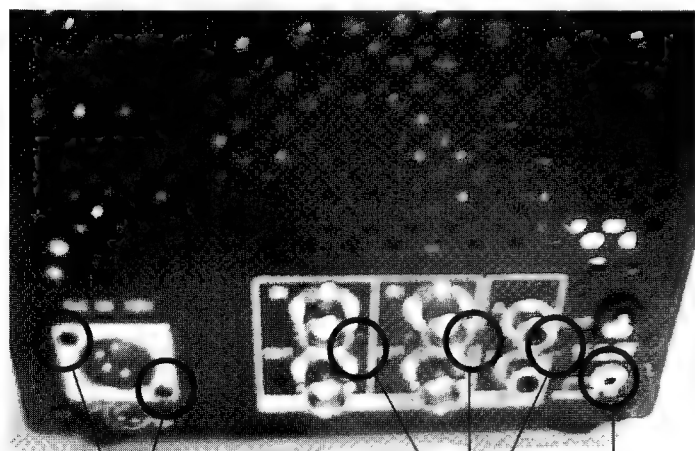


Fig.10

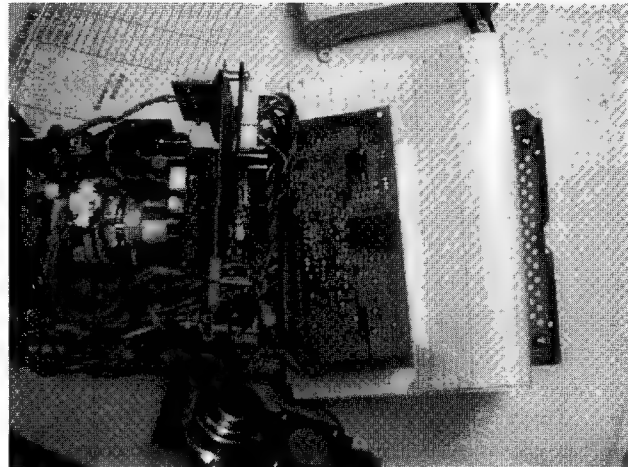
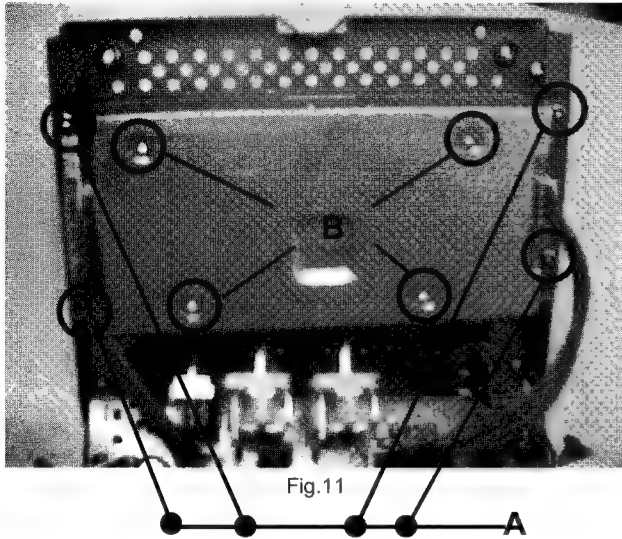
Large size  
screw

Middle size  
screw

Small size  
screw

## DC-DC converter

1. Remove the external cover.
2. Remove the rear cover.
3. Take out 4 screws A (Fig. 11).
4. Inspect as indicated in Fig. 12.  
(Remark) Insert paper to avoid shorting.
5. When replacing DC-DC converter parts, take out 4 screws B.

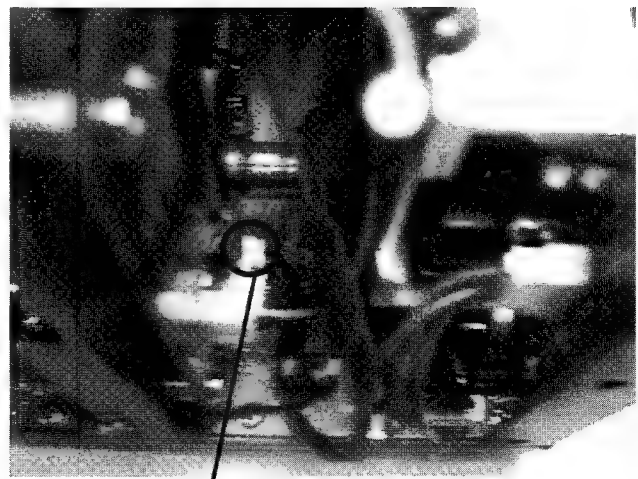


## <REMARKS>

Main chassis inspection is described on the following pages.  
Before proceeding, take out 2 speaker screws, remove the wire connecting the video process board and remove the speaker. This is recommended in order to avoid that the wire is removed from the speaker.



SCREWS



SPEAKER CONNECTOR

### Main chassis inspection

1. Remove the AC adapter.
2. Remove the external cover.
3. Remove the speaker case assembly.
4. Remove the CRT unit.
5. Remove the rear cover (terminal board).
6. Take out 4 screws of the interface board and 4 screws of the main board.  
(The interface and main board locations are shown in Fig. 15.)
7. Take out 2 screws A of the middle bracket assembly (see Figs. 16 and 17).
8. Inspect as indicated in Fig. 18.
9. Insert paper as shown in Fig. 19 to avoid shorting.

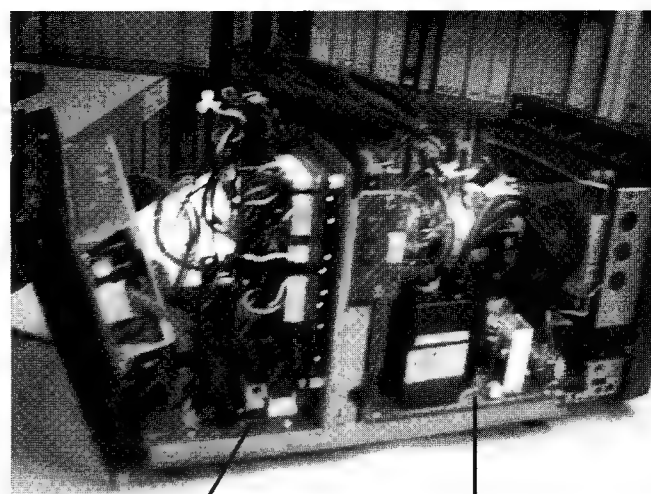


Fig.15

Interface PCB

Main PCB

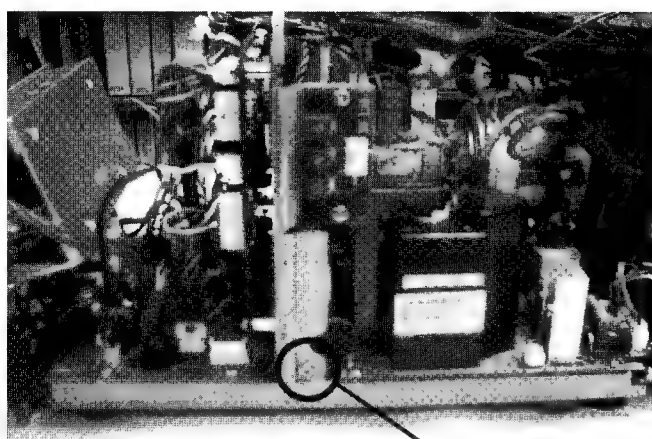


Fig.16

A

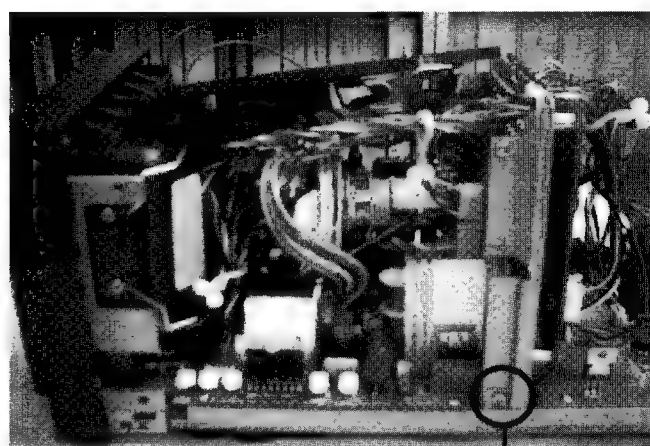


Fig.17

A



Fig.18

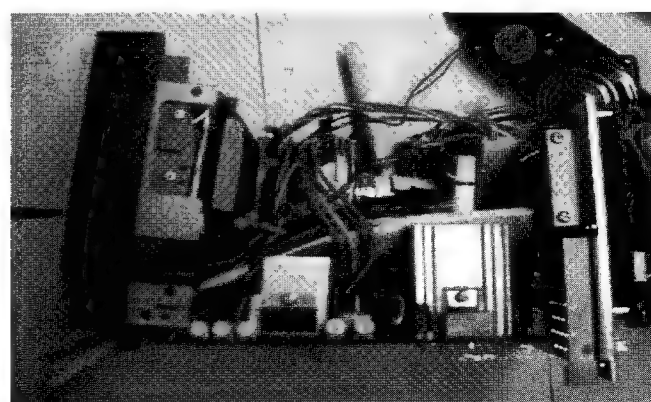


Fig.19

### CRT socket PCB inspection

1. Remove the main chassis (see main chassis inspection).
2. Inspect as indicated in Fig. 20. (Insert paper to avoid shorting.)

### Video processor PCB inspection

1. Remove the main chassis (see main chassis inspection).
2. Take out 4 screws of the video processor PCB (Fig. 21).
3. Inspect as indicated in Fig. 22.  
(Insert paper to avoid shorting.)



Fig.20

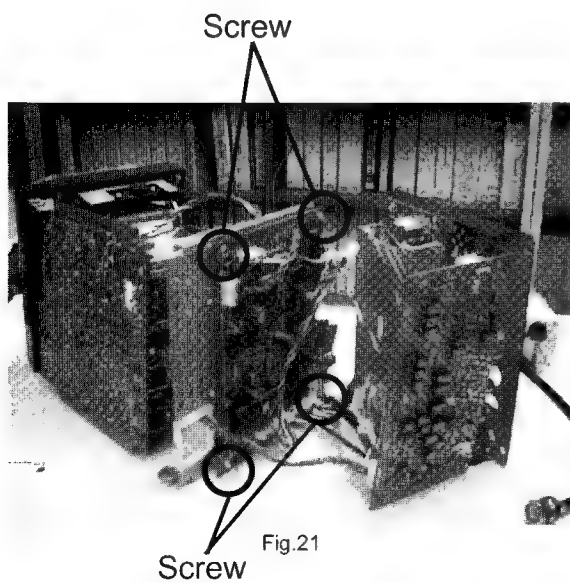


Fig.22

# Adjustment

## Before starting Service Adjustment

1. Before starting adjustment, supply power and allow the set and test equipment to warmup at least 20 minutes.
2. Check for correct AC power source.
3. Use care not to disturb internal controls not specifically mentioned in the adjustment.

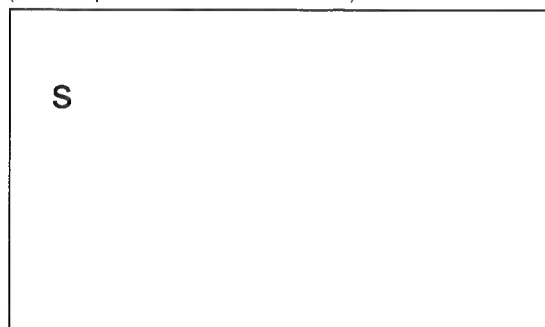
## Measuring Instrument and Fixtures

1. DC voltmeter (digital voltmeter)
2. Frequency counter
3. Oscilloscope
4. Pattern generator (408 NPS Leader)

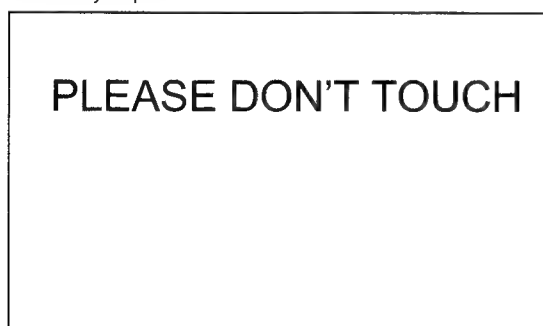
## Adjust mode

### 1.How to enter

- (1) Supply a signal to Video B.
- (2) Simultaneously press the Video B and Menu buttons.
- (3) The letter S appears on the screen (Video B picture and sound selected).



- (4) While S is displayed, simultaneously press the Video B and Size Select buttons.
- (5) While Please Don't Touch appears on the screen, press the Menu key to produce the service mode.



- (6) The selected service item changes each time the Menu key is pressed.



- (7) Adjust the service item by pressing the Volume + and - keys.

### 2.Adjustment items

Item Number	Item	Standard Setting Value	Variable range
S01	Contrast	64	4~124
S02	Brightness	62	4~124
S03	Sharpness	94	4~124
S04	CHROMA(NTSC)	62	4~124
S05	CHROMA(PAL)	44	4~124
S06	PHASE	48	4~124
C01	TV/CATV	00	00:TV 01:CATV
C02	US CATV MODE	00	00:STD 01:HRC 02:IRC

#### Note

The S05 data do not change unless a PAL signal is applied to Video B.

If a PAL signal is applied to Video B, the S04 data do not change. In absence of a signal, if S04 is changed, S05 cannot be changed.

### 3.How to exit service mode

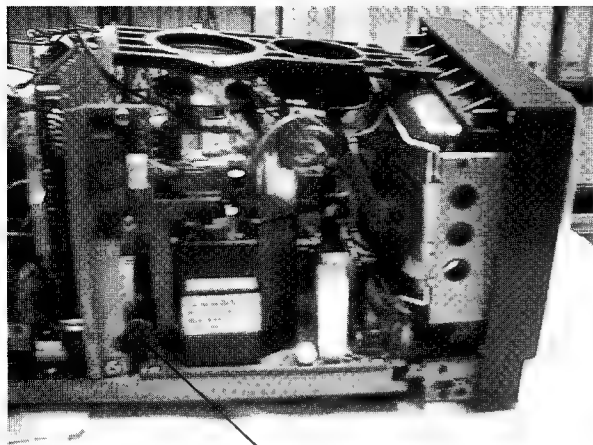
Press the Blue Check button or switch power off to release the service mode.



## VR adjustments

### 1.FOCUS ADJUSTMENT

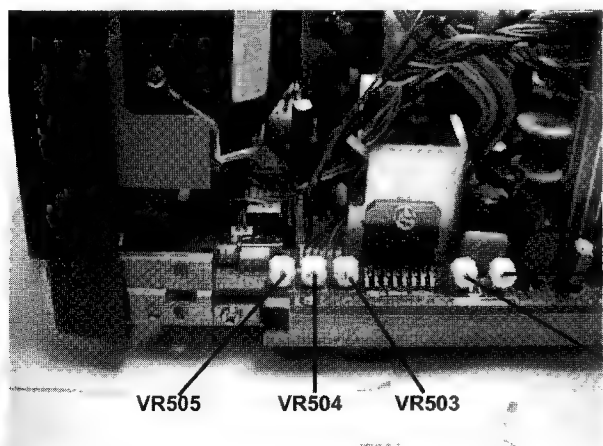
- (1) Receive a crosshatch signal.
- (2) Allow a minimum of 2 minutes warmup before adjusting.
- (3) Set Brightness to standard position (0) and Contrast to maximum (30).
- (4) Adjust the Focus VR for best setting.



FOCUS VR

### 2.Vertical amplitude

- (1) Receive a PAL crosshatch signal.
- (2) Press the Size Select button and select 16:9.
- (3) Adjust VR501 to set the vertical amplitude to 48 mm.
- (4) Press Size Select and select overscan.
- (5) Adjust VR504 to set the top of the screen between the first and second lines.
- (6) Press Size Select and select underscan.
- (7) Adjust VR503 to set the vertical amplitude to 64 mm.
- (8) Change to an NTSC crosshatch signal.
- (9) Press the Size Select button and select 16:9.
- (10) Adjust VR505 to set the vertical amplitude to 48 mm.



VR505

VR504

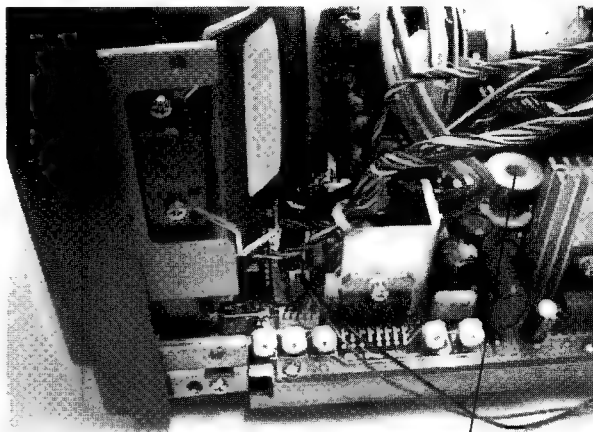
VR503

VR501

VR502

### 3.Horizontal amplitude

- (1) Receive a crosshatch signal.
- (2) Adjust L401 for natural horizontal amplitude.



L401

### 4.Horizontal position

- (1) Receive a crosshatch signal.
- (2) Adjust VR401 for natural horizontal position.

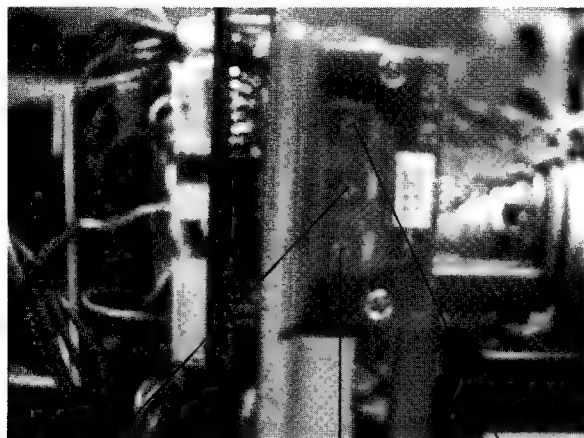


VR401



### 5.RGB drive

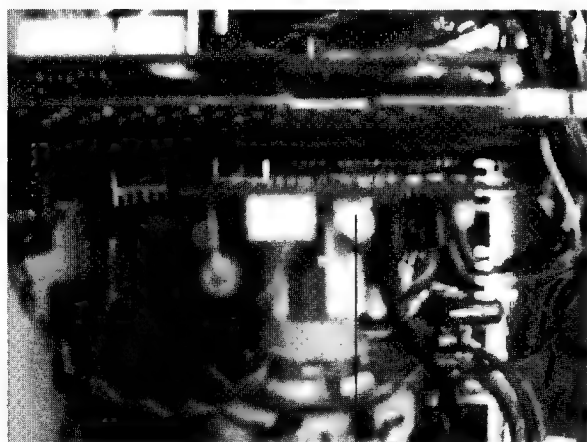
- (1) Receive an all white signal.
- (2) Set VR602, VR603 and VR604 to center.
- (3) Set VR604 to 1/3 position.
- (4) Adjust white balance with VR602 and VR603.
- (5) Lastly, adjust sub-contrast with VR601 of the CRT socket board.



VR604

VR602

VR603



VR601

### 6.Sub-bright

- (1) Supply an SMPTE color pattern input.
- (2) Adjust VR404 (directly below CRT neck) to where the black level pattern begins to appear at the lower right of the screen.

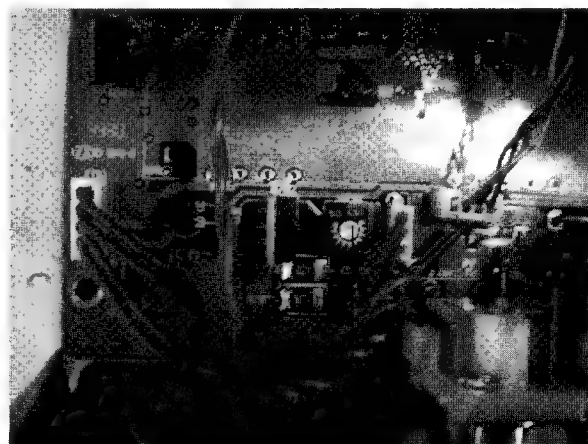


VR404

STICK

### 7. Battery Check

- (1) Connect 12V battery to the DC 12V terminal
- (2) Adjust VR701 to IC701 on the Interface PWB to  $6 \pm 0.05V$



IC701

VR701



# TM-L450TU STANDARD CIRCUIT DIAGRAM

## ■ NOTE ON USING CIRCUIT DIAGRAMS

### 1.SAFETY

The components identified by the  $\Delta$  symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

### 2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1)Input signal : Color bar signal
  - (2)Setting positions of each knob/button and variable resistor :Original setting position when shipped
  - (3)Internal resistance of tester :DC 20k  $\Omega$  /V
  - (4)Oscilloscope sweeping time :H  $\Rightarrow$  20 $\mu$ S/div  
:V  $\Rightarrow$  5mS/div  
:Others  $\Rightarrow$  Sweeping time is specified
  - (5)Voltage values :All DC voltage values
- \* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

### 3.INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board :R1209→R209

### 4.INDICATIONS ON THE CIRCUIT DIAGRAM

#### (1)Resistors

##### ●Resistance value

- No unit :[ $\Omega$ ]
- K :[K  $\Omega$ ]
- M :[M  $\Omega$ ]

##### ●Rated allowable power

- No indication :1/10 [W]
- Others :As specified

##### ●Type

- No indication :Carbon resistor
- OMR :Oxide metal film resistor
- MFR :Metal film resistor
- MPR :Metal plate resistor
- UNFR :Uninflammable resistor
- FR :Fusible resistor

\*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

#### (2)Capacitors

##### ●Capacitance value

- 1 or higher :[pF]
- less than 1 :[ $\mu$ F]

##### ●Withstand voltage

- No indication :DC50[V]
- Others :DC withstand voltage [V]
- AC indicated :AC withstand voltage [V]

\*Electrolytic Capacitors

47/50[Example]:Capacitance value [ $\mu$ F]/withstand voltage[V]

##### ●Type

- No indication :Ceramic capacitor
- MY :Mylar capacitor
- MM :Metalized mylar capacitor
- PP :Polypropylene capacitor
- MPP :Metalized polypropylene capacitor
- MF :Metalized film capacitor
- TF :Thin film capacitor
- BP :Bipolar electrolytic capacitor
- TAN :Tantalum capacitor

##### (3)Coils



- No unit :[ $\mu$ H]
- Others :As specified

##### (4)Power Supply



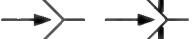
-  :B1
-  :B2
-  :9V
-  :5V

\*Respective voltage values are indicated





##### (5)Test point

-  :Test point
-  :Only test point display

##### (6)Connecting method

-  :Connector
-  :Wrapping or soldering
-  :Receptacle

##### (7)Ground symbol

-  :LIVE side ground
-  :ISOLATED(NEUTRAL) side ground
-  :EARTH ground
-  :DIGITAL ground

## 5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : ( $\perp$ ) side GND and the ISOLATED(NEUTRAL) : ( $\nwarrow$ ) side GND. Therefore, care must be taken for the following points.

- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus ( oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

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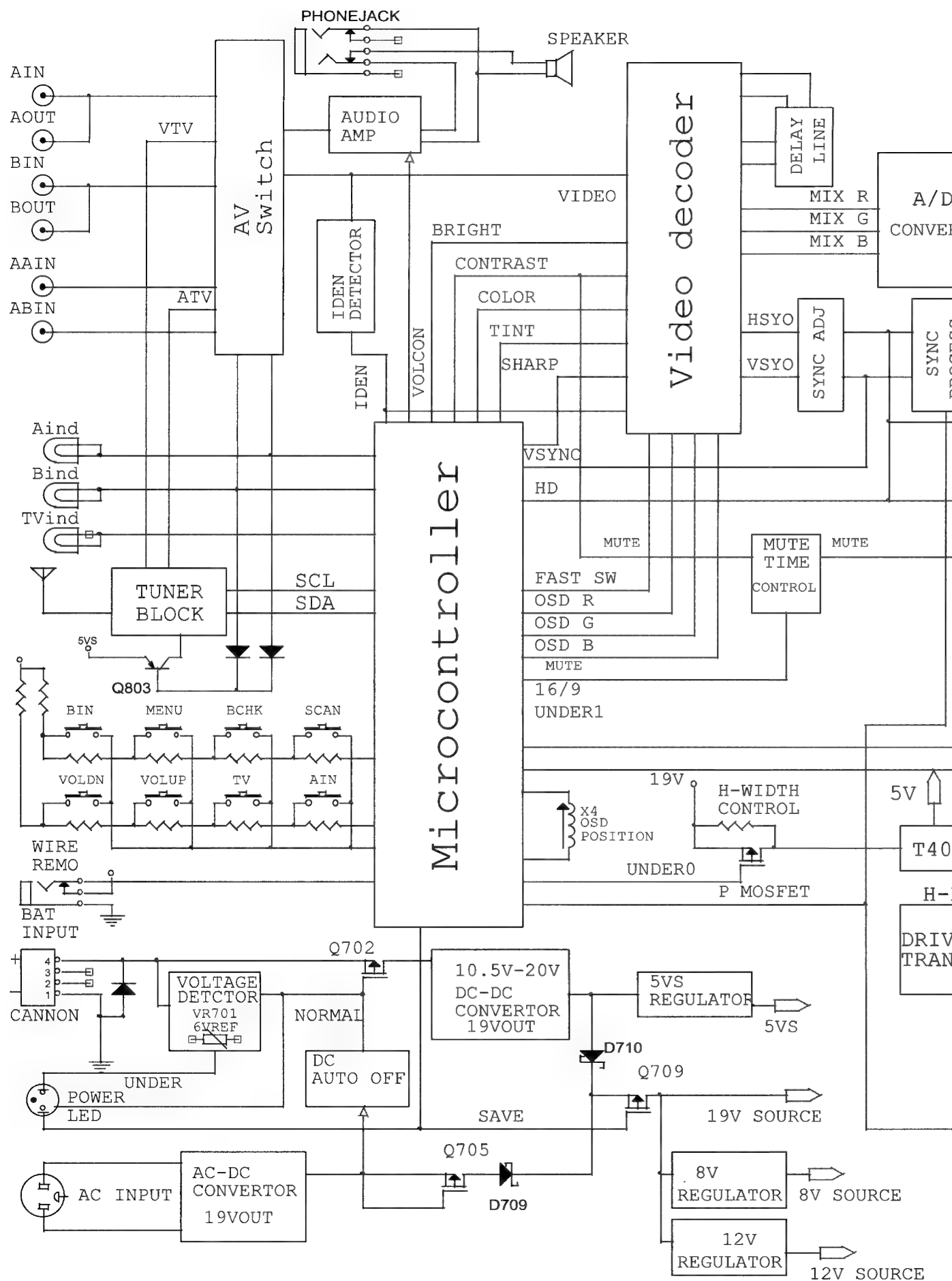
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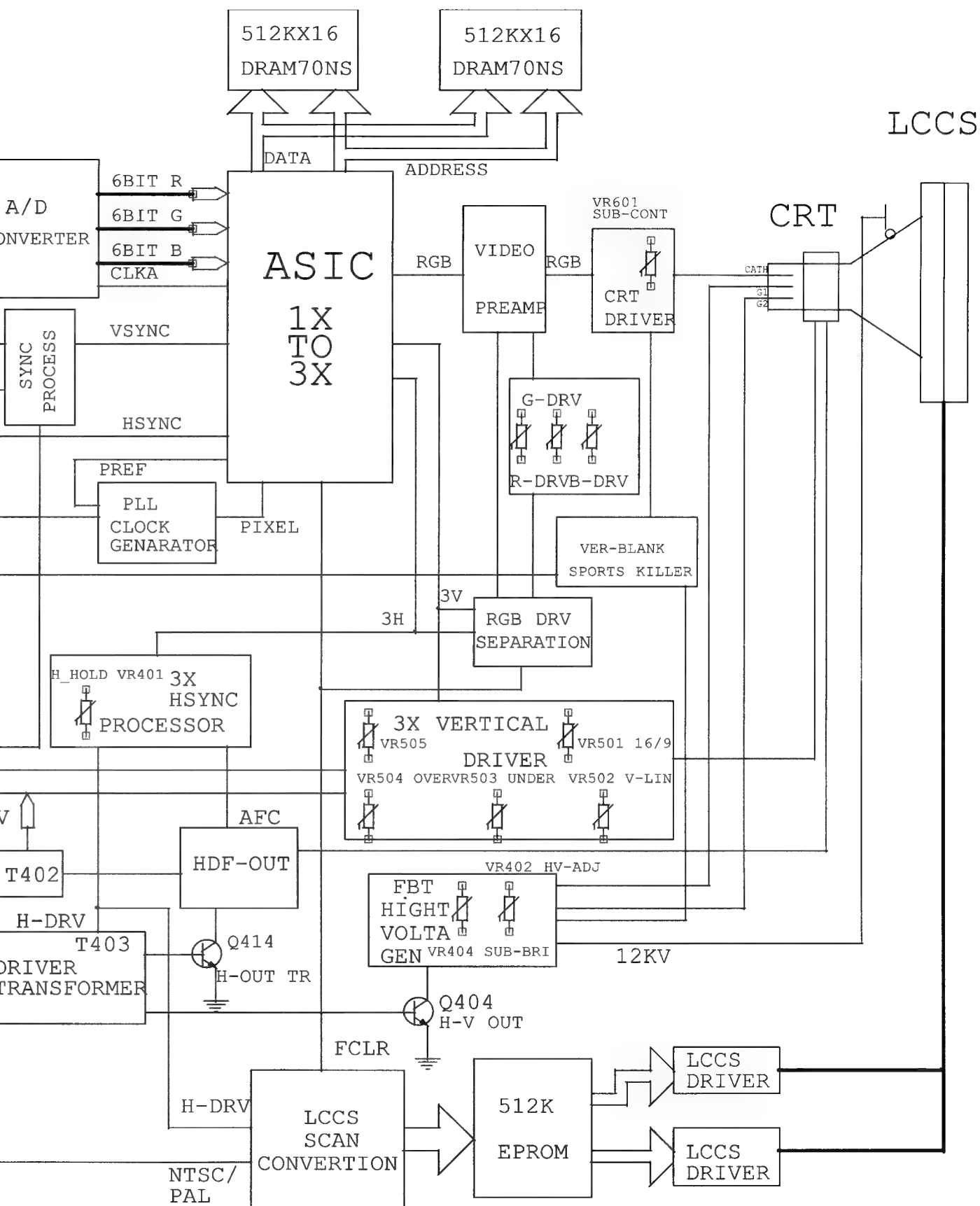
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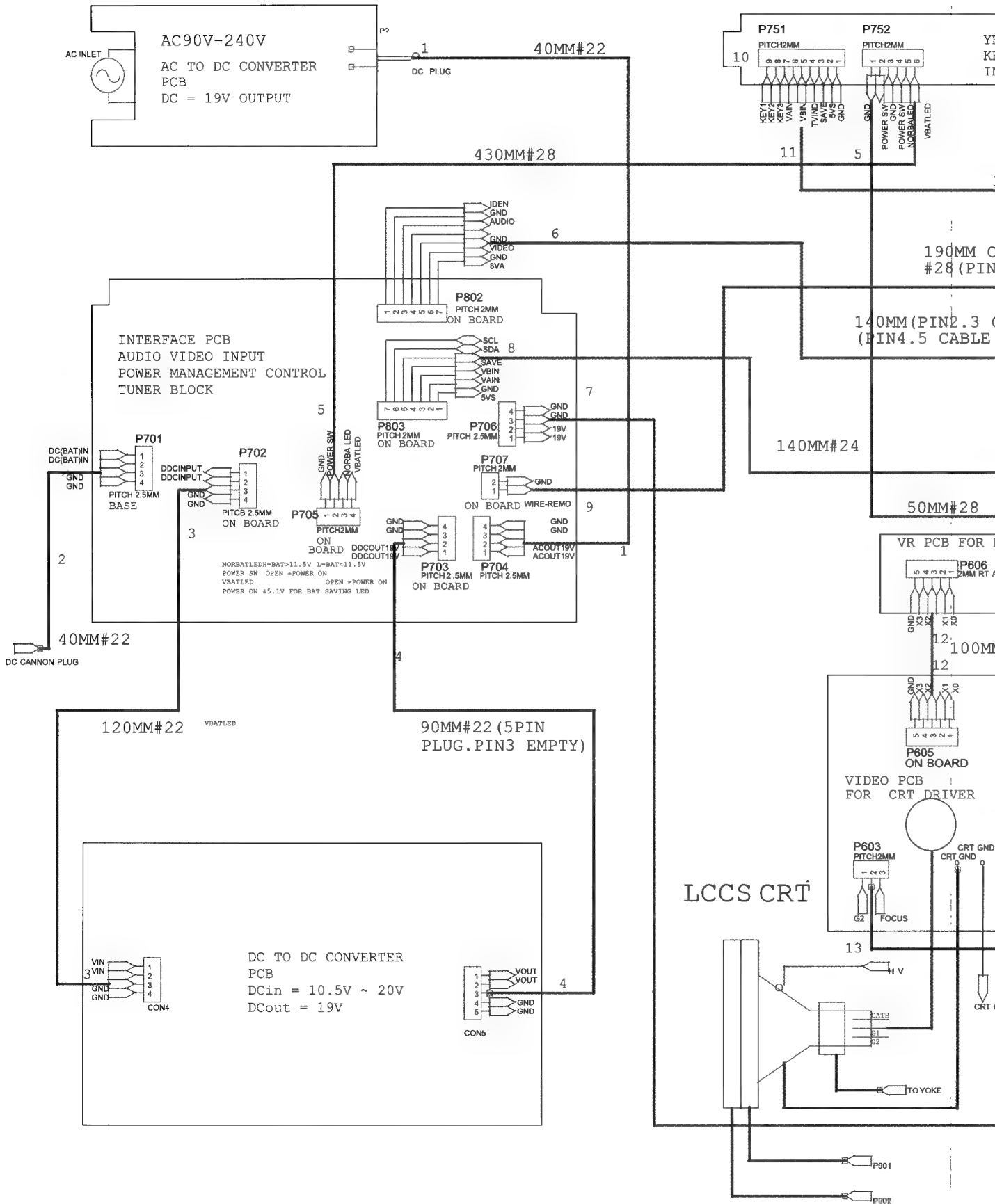
*CRT SOCKET PWB PATTERN* .....2-31

## BLOCK DIAGRAM

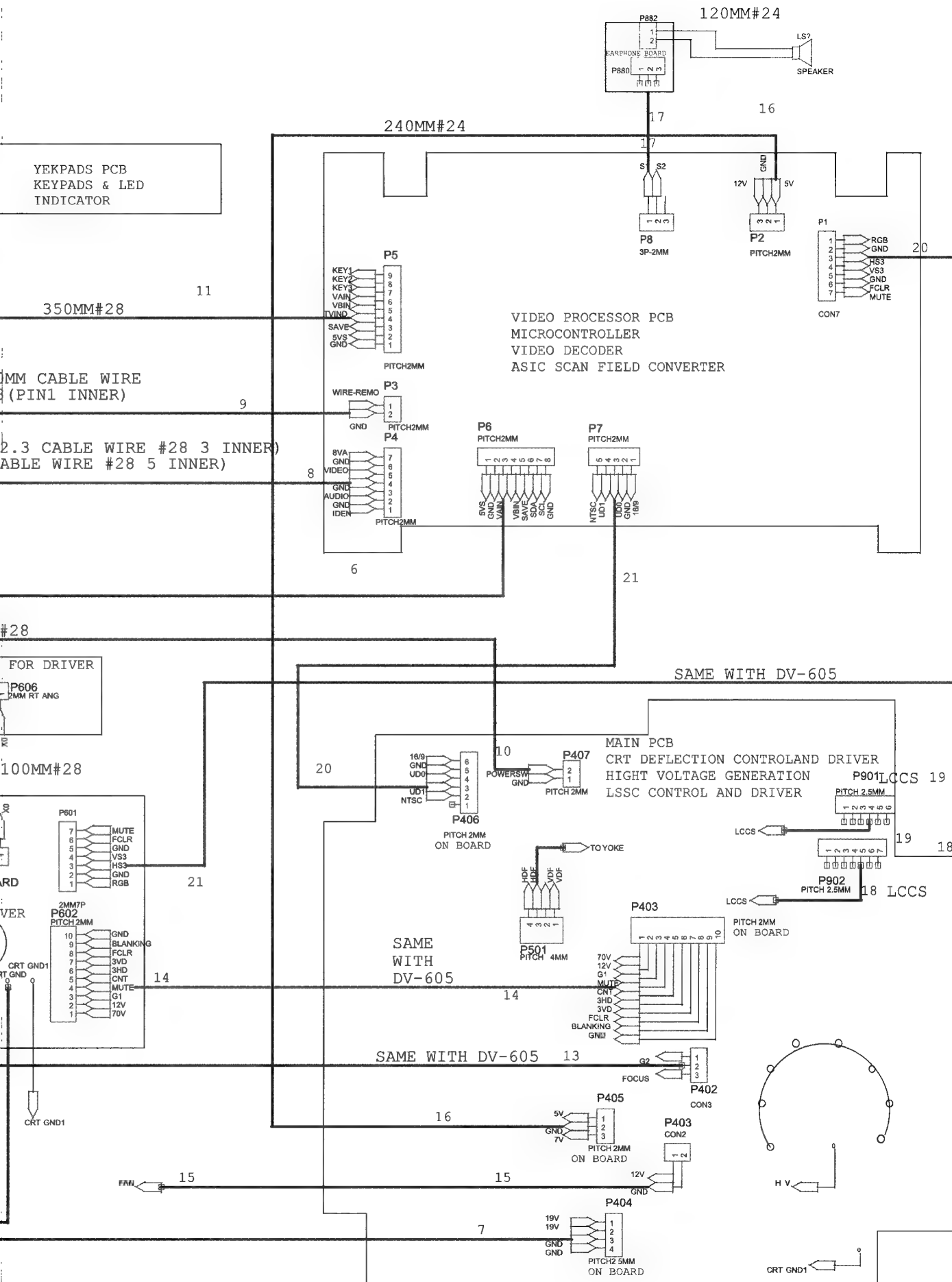


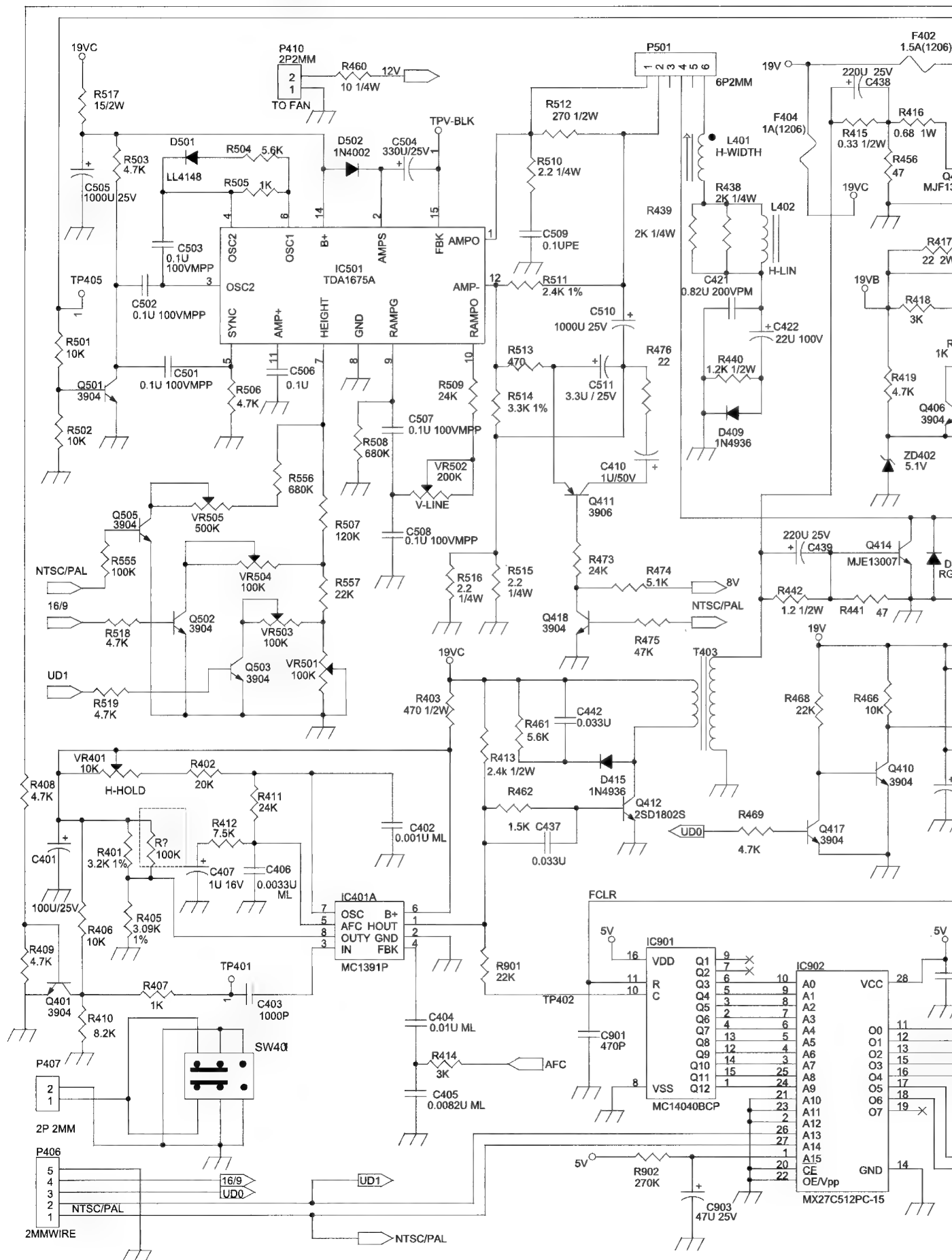


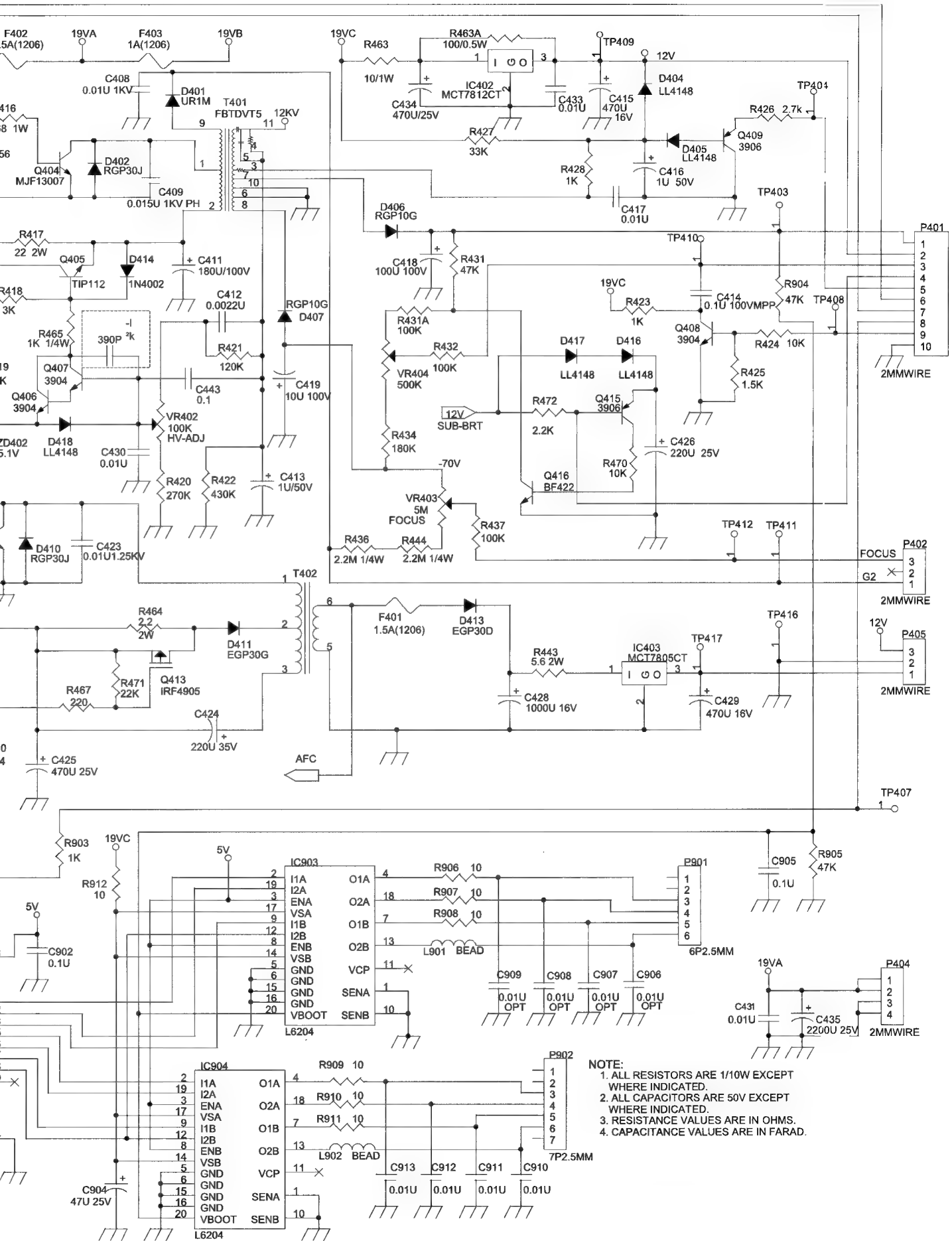
# WIRING ARRIGNMENT



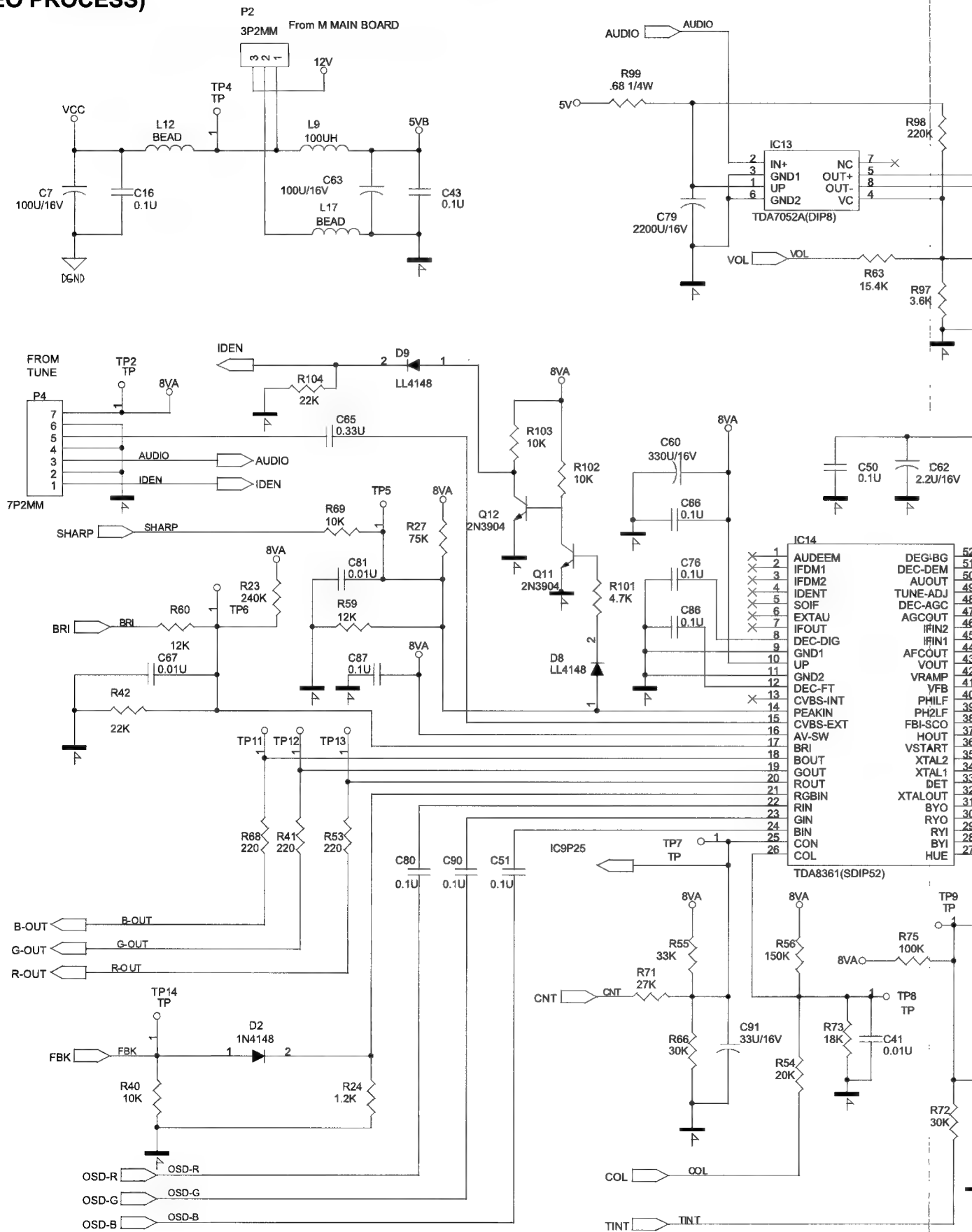


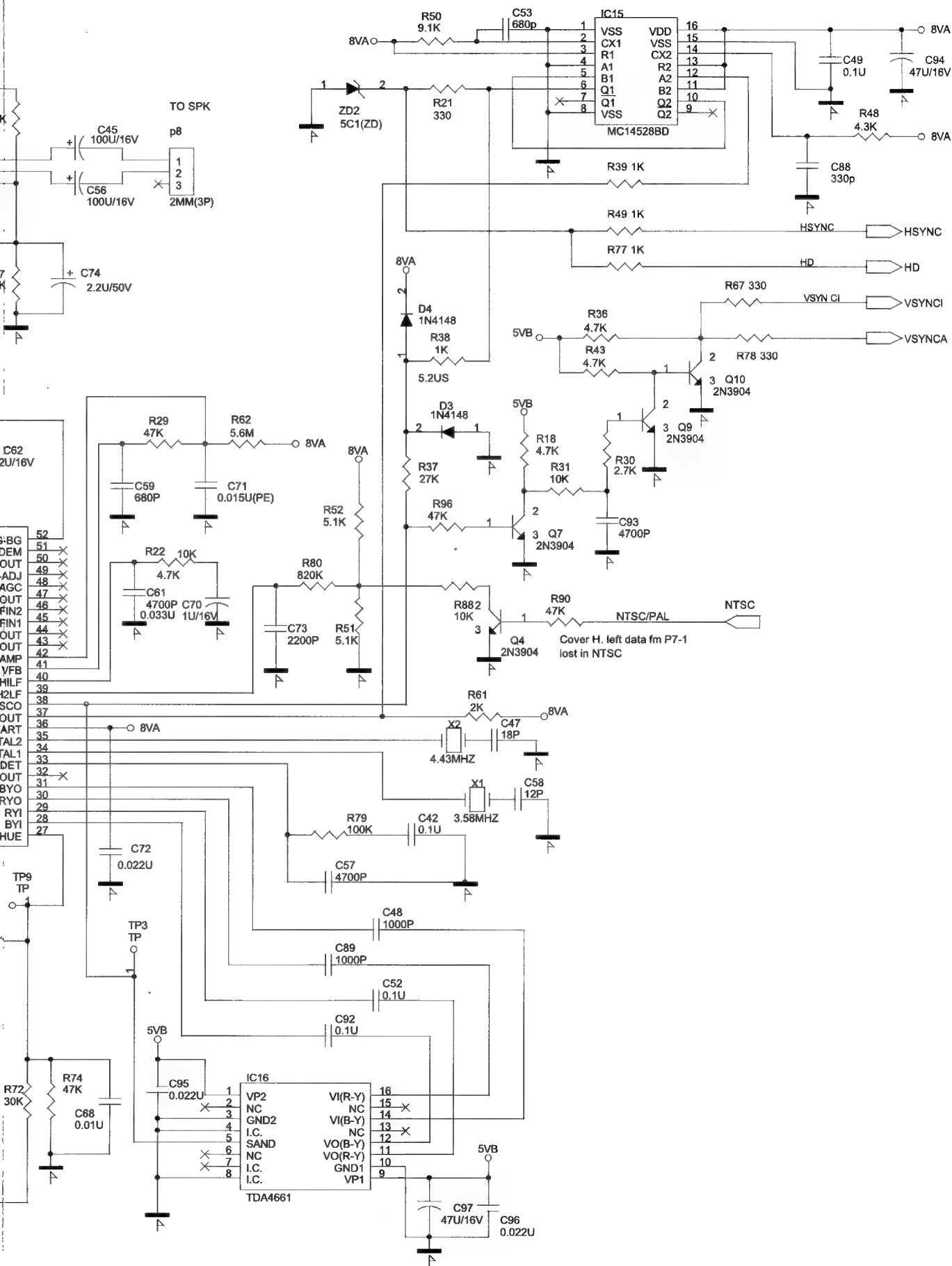




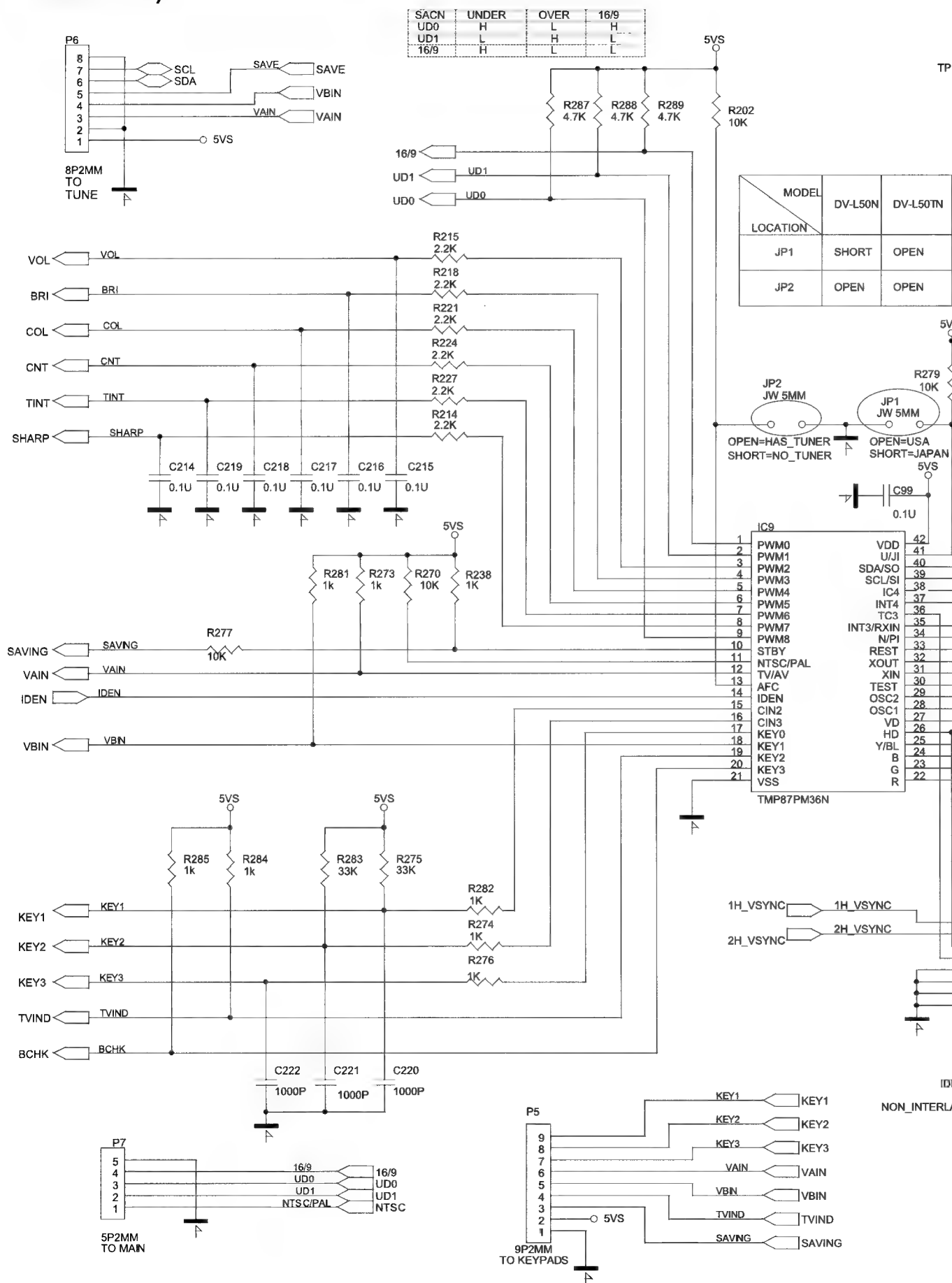


# **[ VIDEO PROCESSOR PWB CIRCUIT DIAGRAM ]** **(VIDEO PROCESS)**





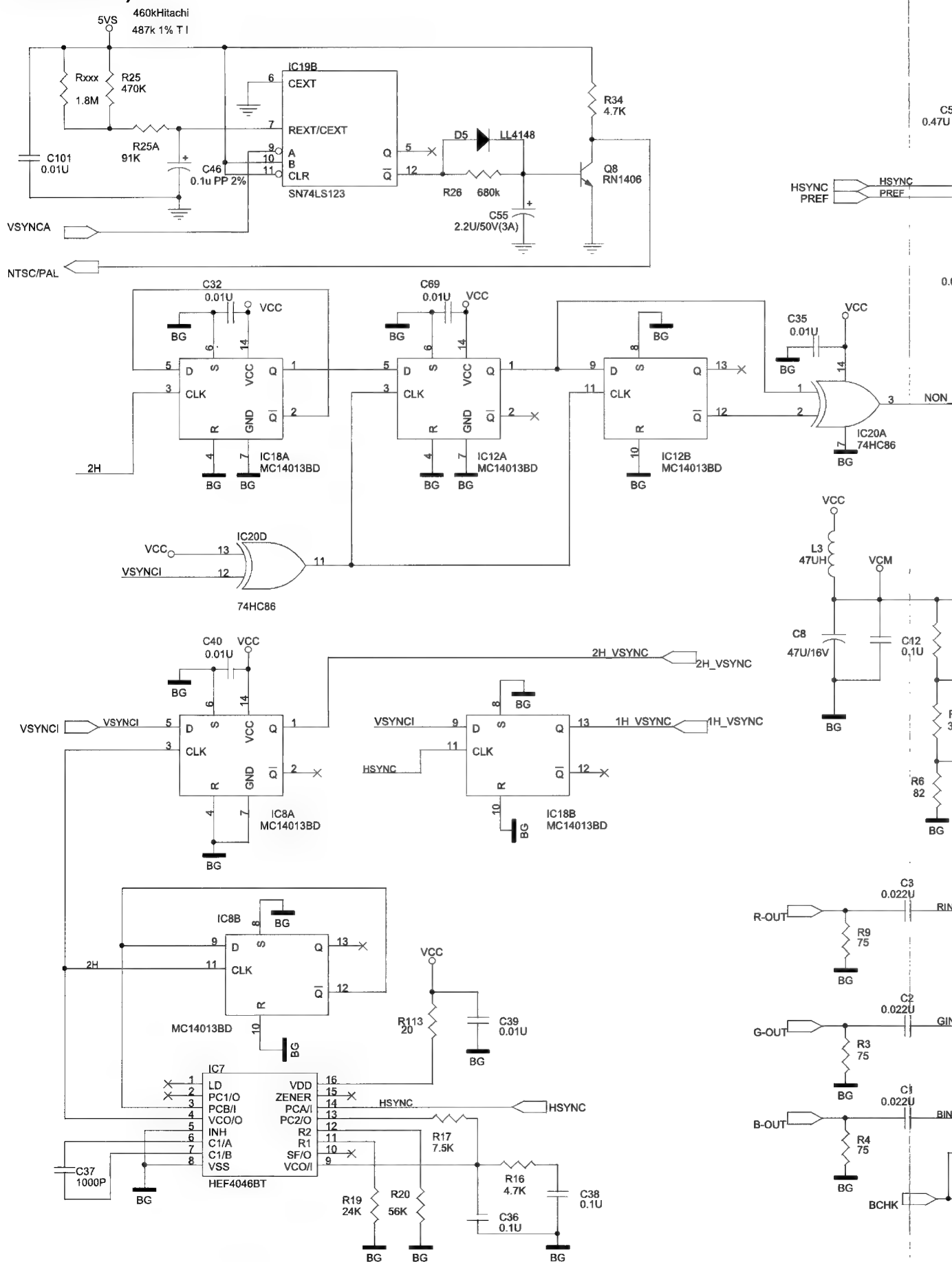
# **【 VIDEO PROCESSOR PWB CIRCUIT DIAGRAM 】** **(MICRO COMPUTER)**

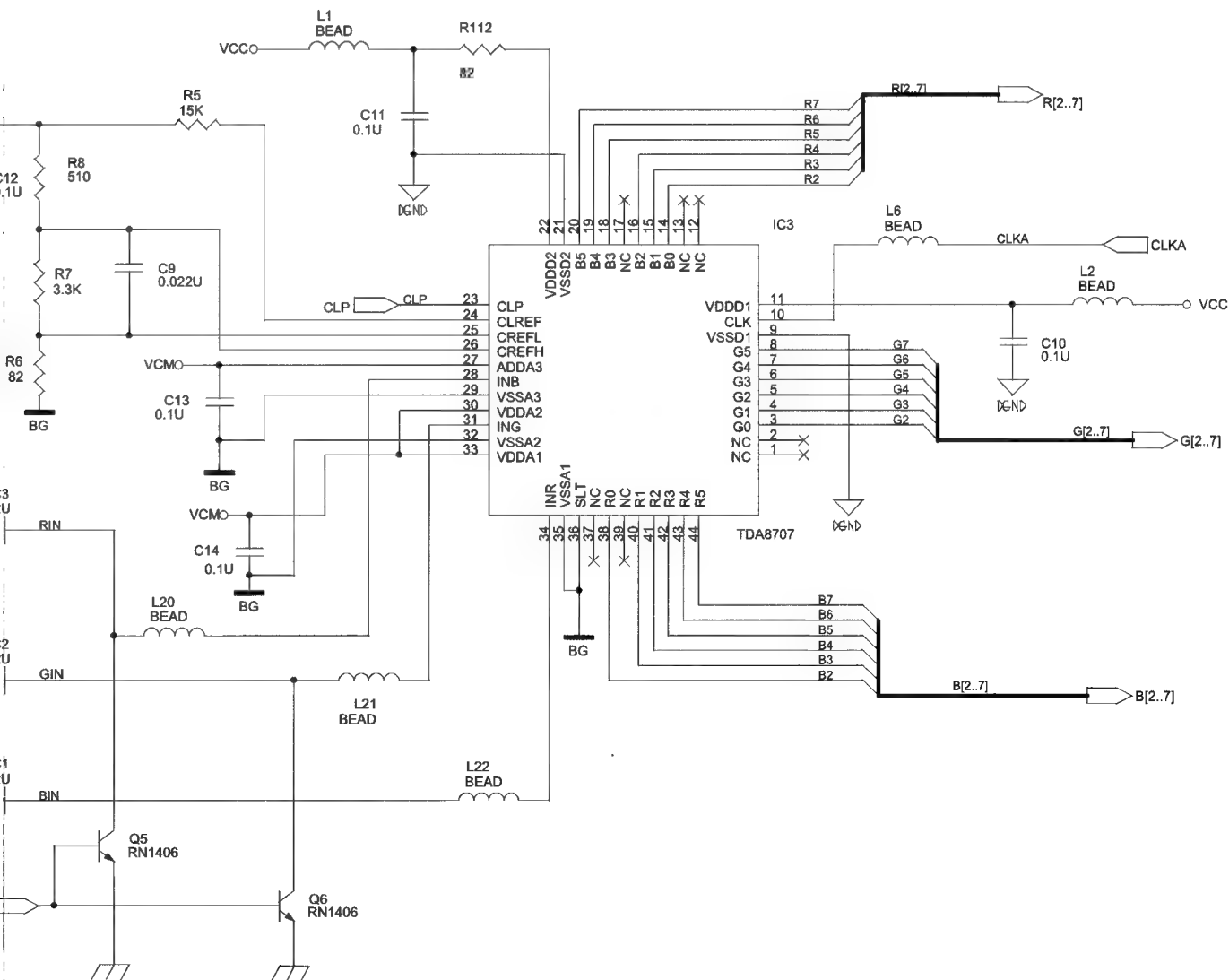




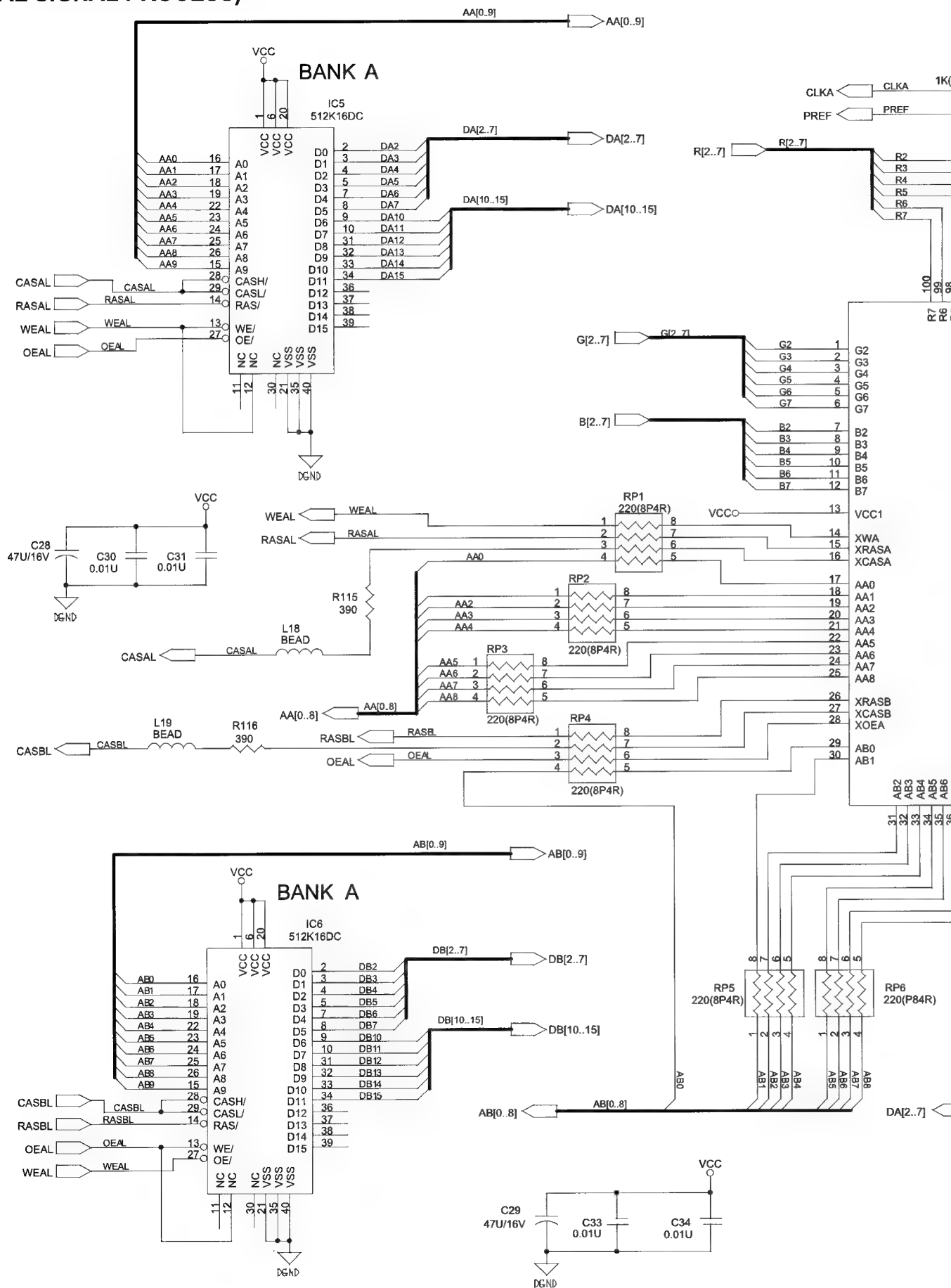


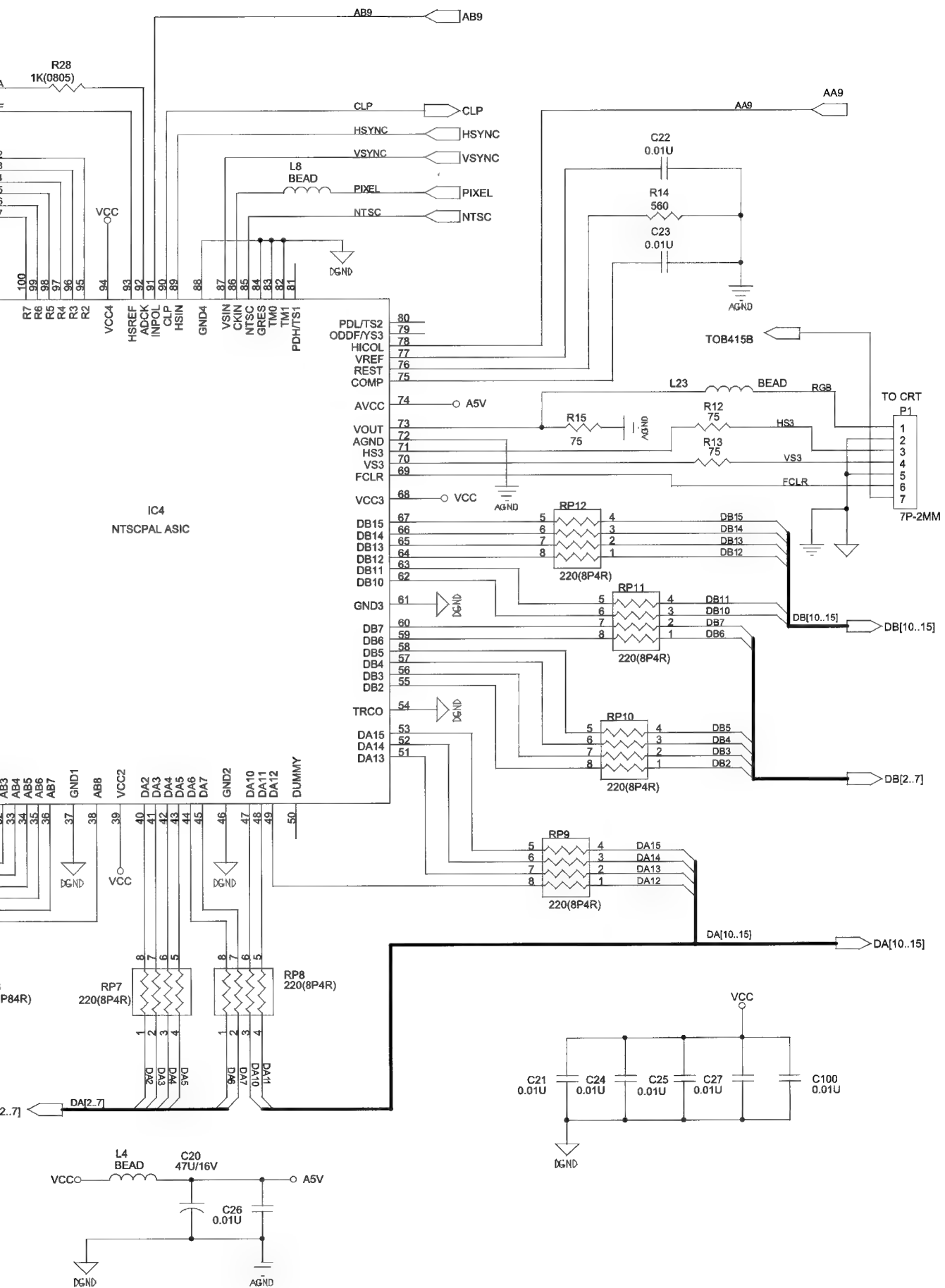
# **[ VIDEO PROCESSOR PWB CIRCUIT DIAGRAM ]** **(AD CONVERTER)**



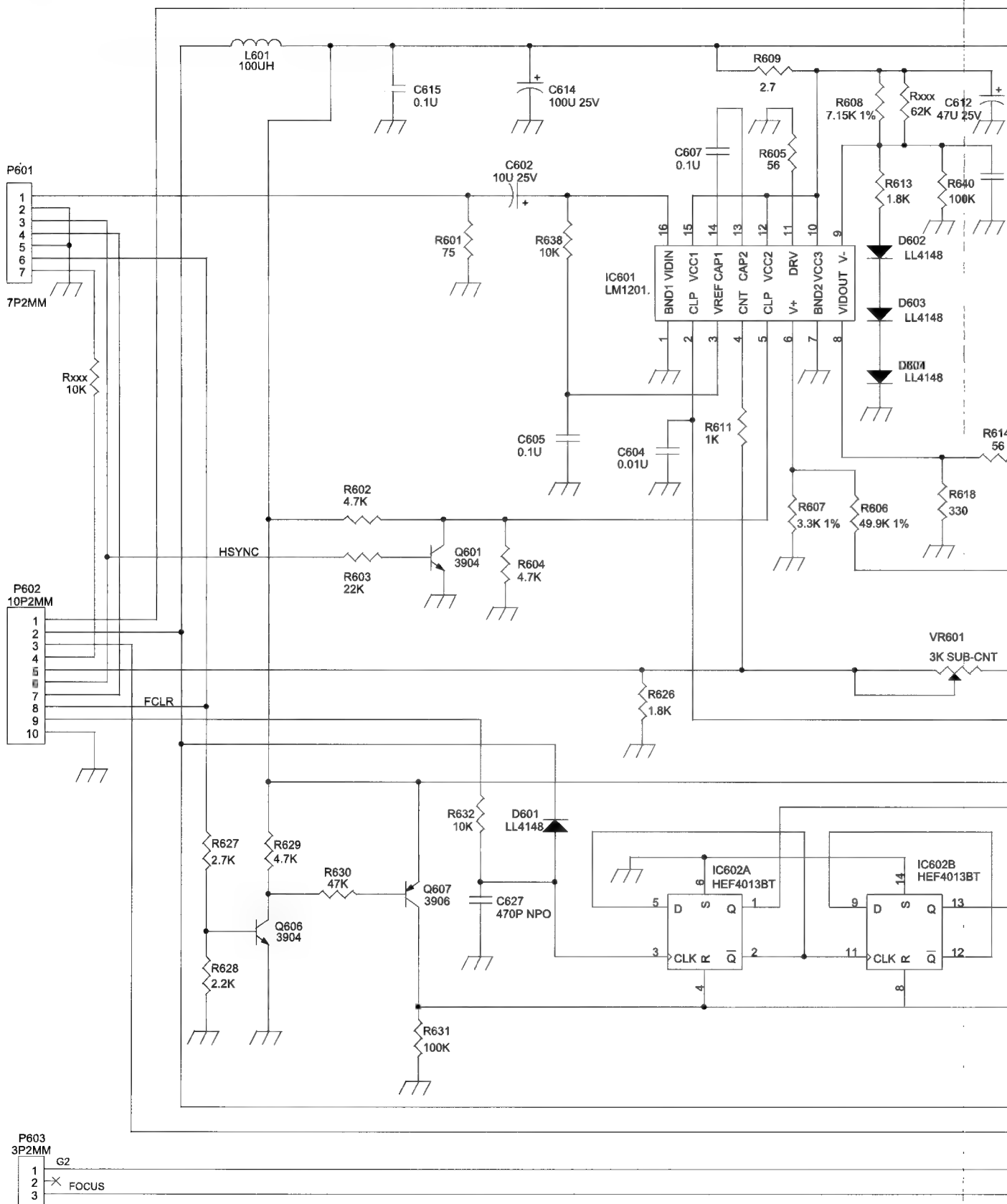


### 【 VIDEO PROCESSOR PWB CIRCUIT DIAGRAM 】

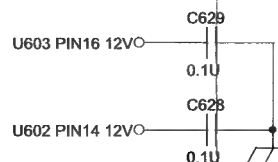


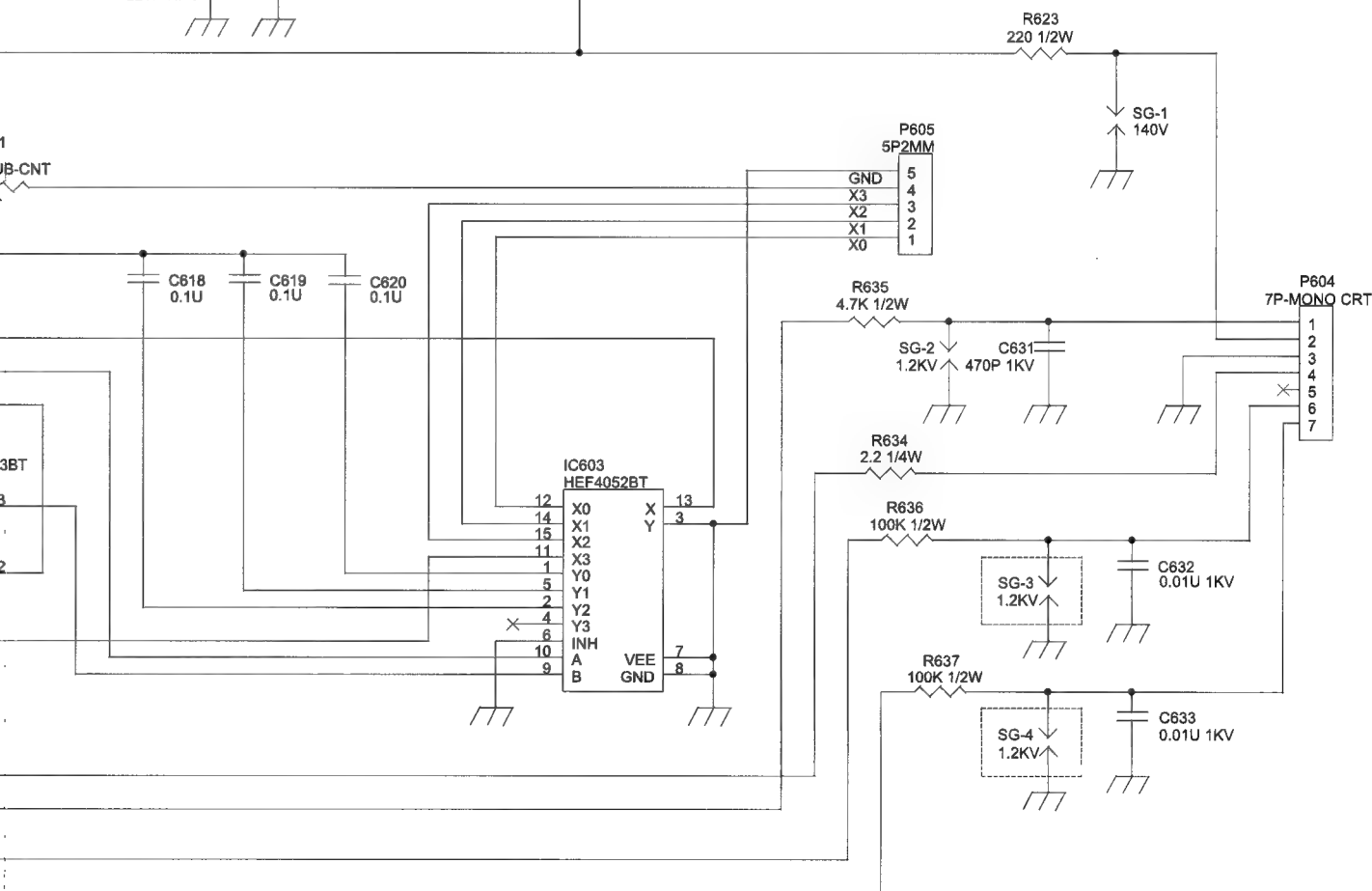
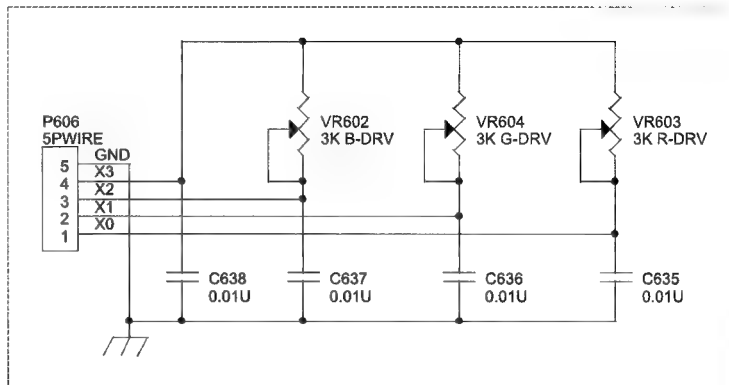
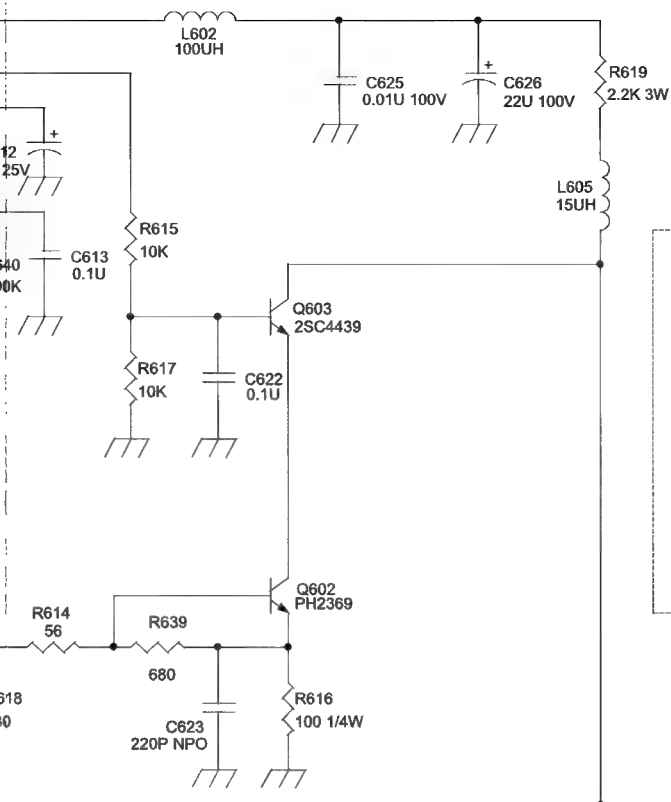


# 【 CRT SOCKET PWB CIRCUIT DIAGRAM 】



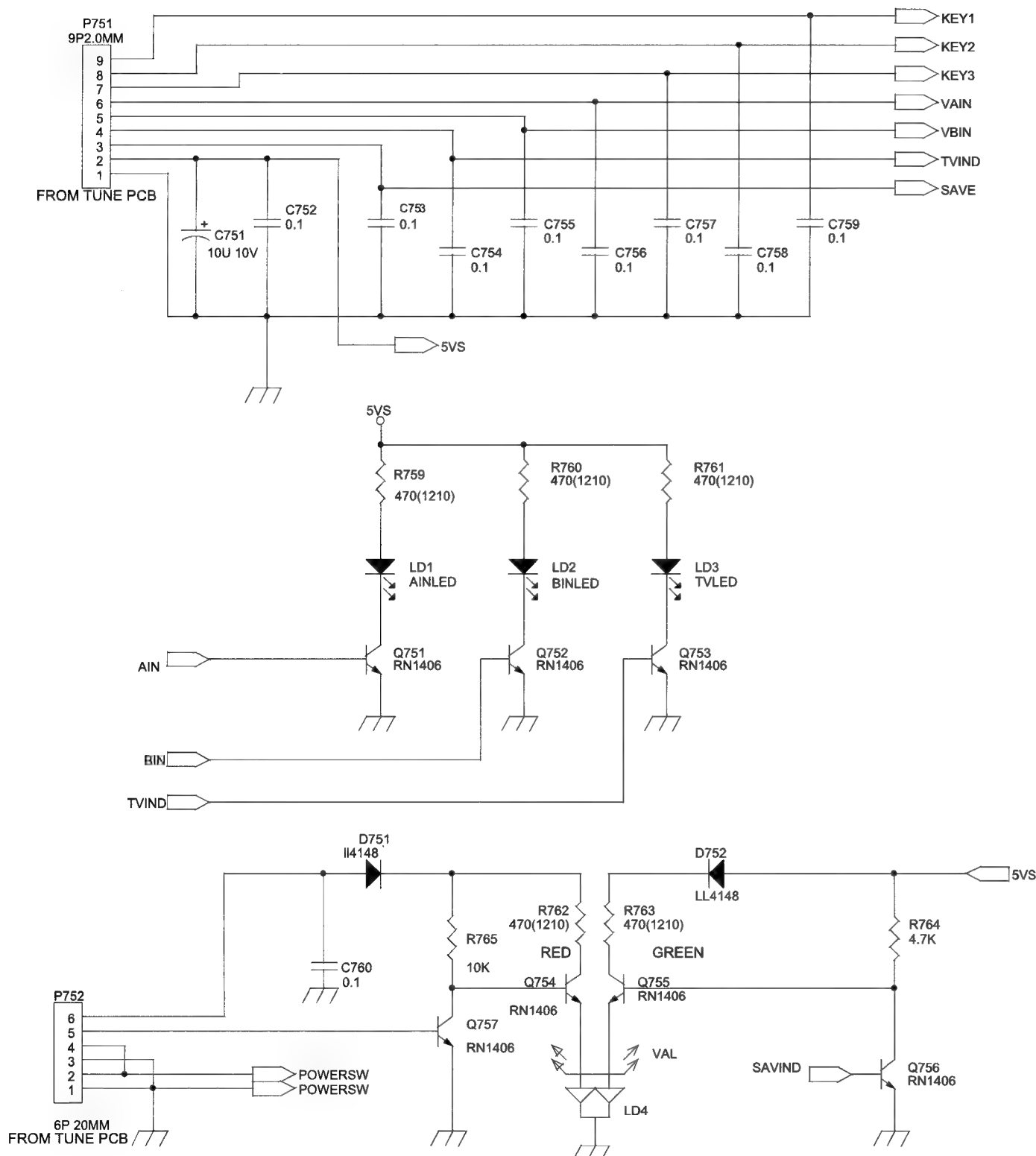
NOTE:  
 1. ALL RESISTORS ARE 1/8W EXCEPT WHERE INDICATED.  
 2. ALL CAPACITORS ARE 50V EXCEPT WHERE INDICATED.  
 3. RESISTANCE VALUES ARE IN OHMS.  
 4. CAPACITANCE VALUES ARE IN FARAD.





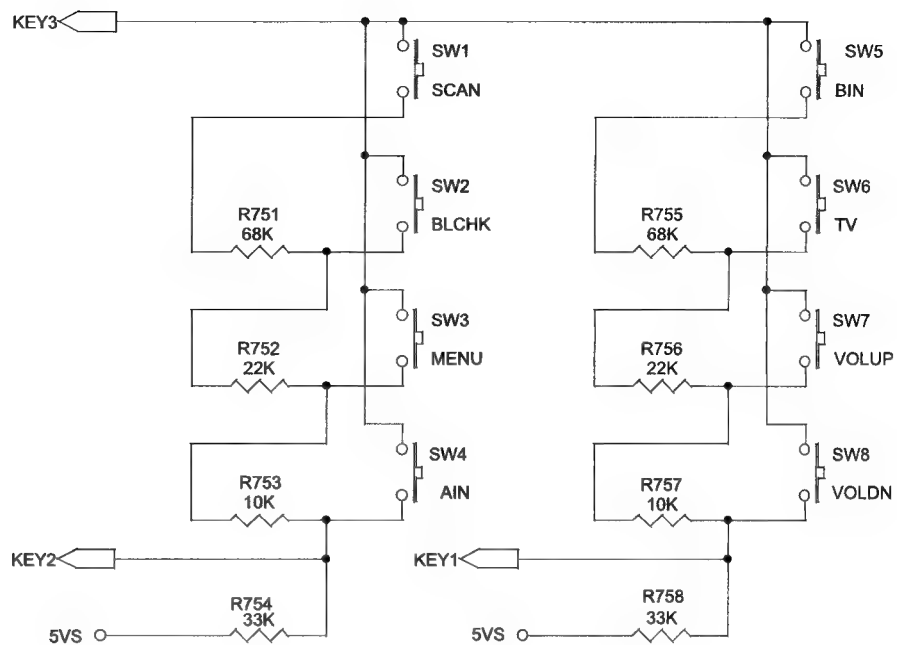
- 1.U603 PIN16=12V PIN 8=GND  
2.U602 PIN14=12V PIN 7=GND

# 【 KEY-VR PWB CIRCUIT DIAGRAM 】

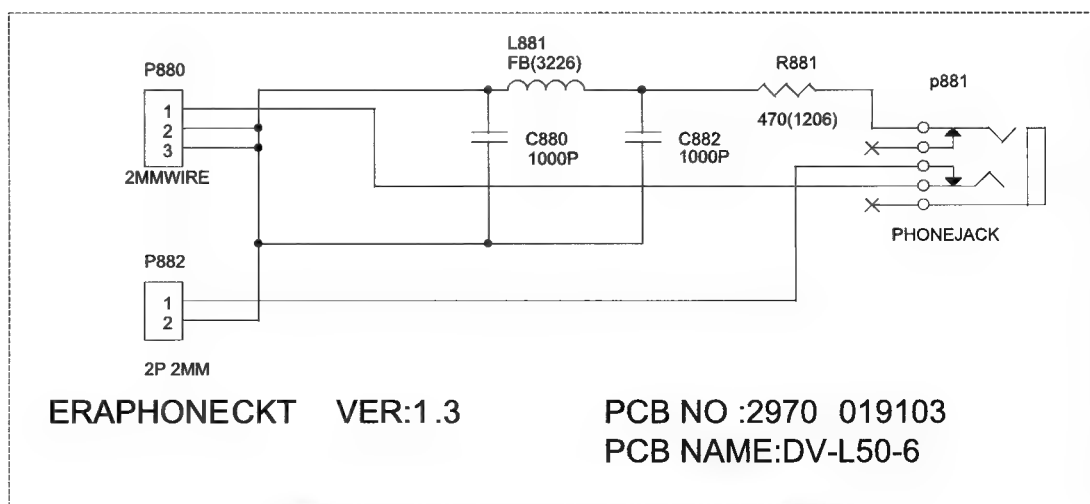


## NOTE:

1. ALL RESISTORS ARE 1/8W EXCEPT WHERE INDICATED.
2. ALL CAPACITORS ARE 50V EXCEPT WHERE INDICATED.
3. RESISTANCE VALUES ARE IN OHMS.
4. CAPACITANCE VALUES ARE IN FARAD.

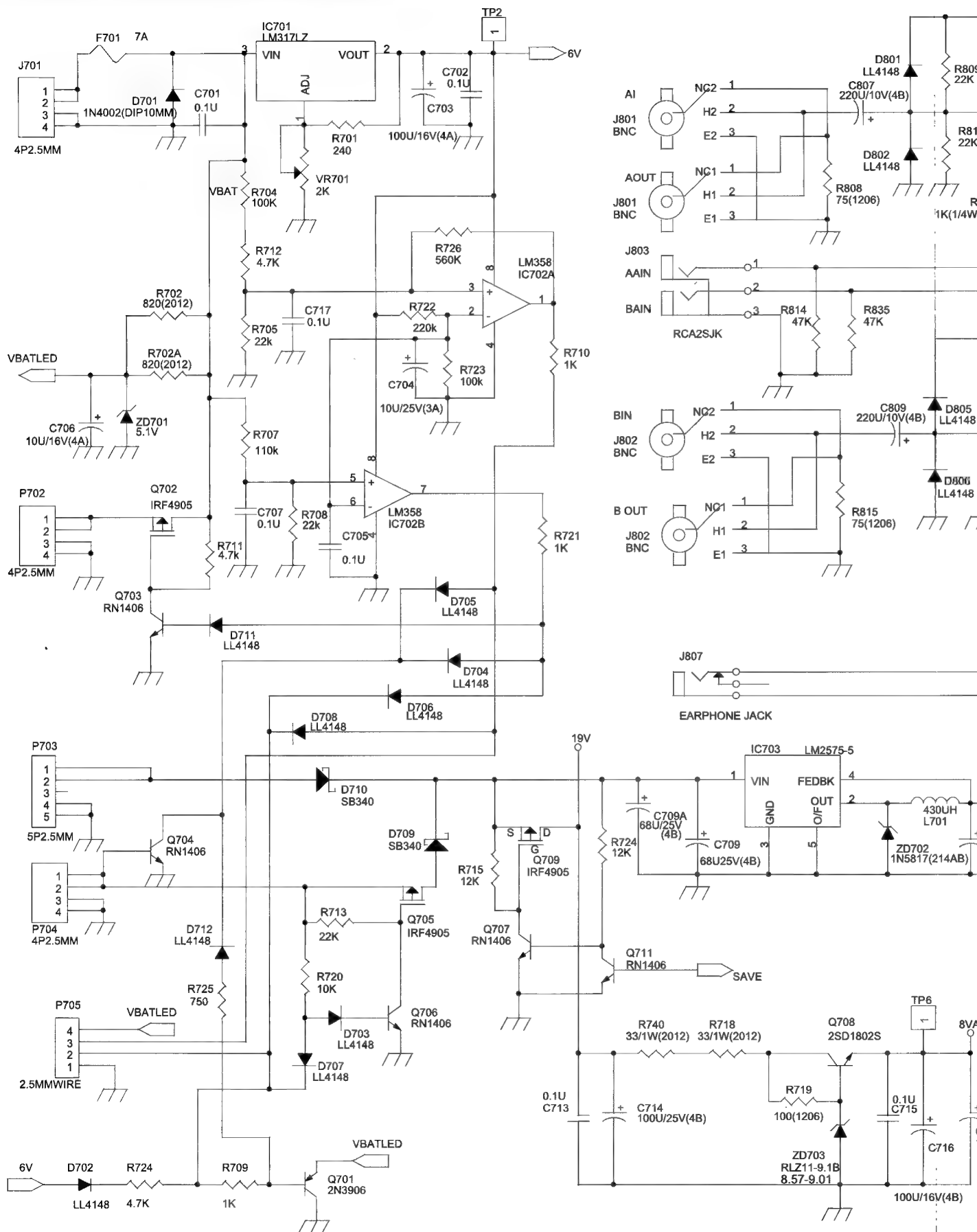


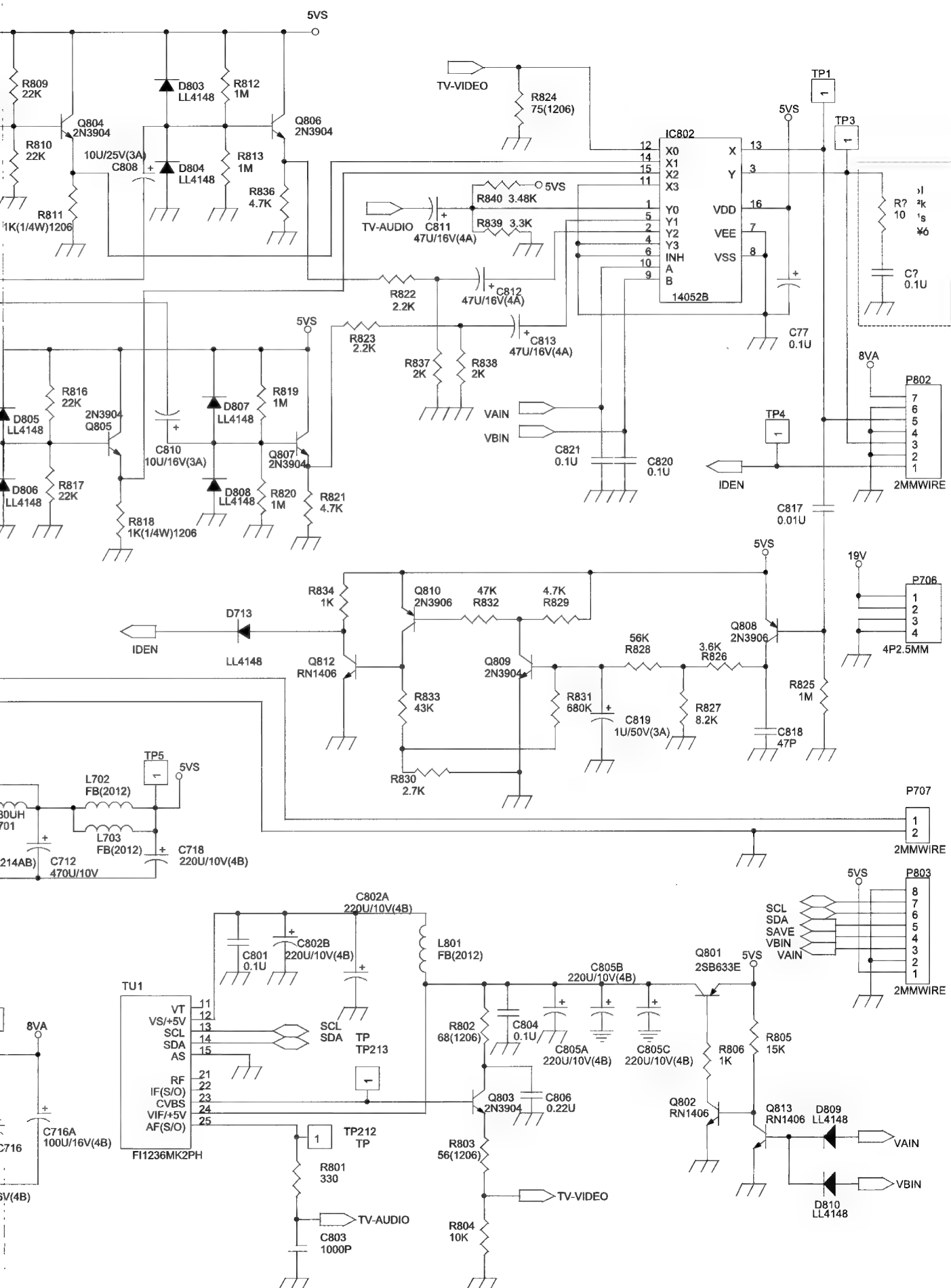
5VS



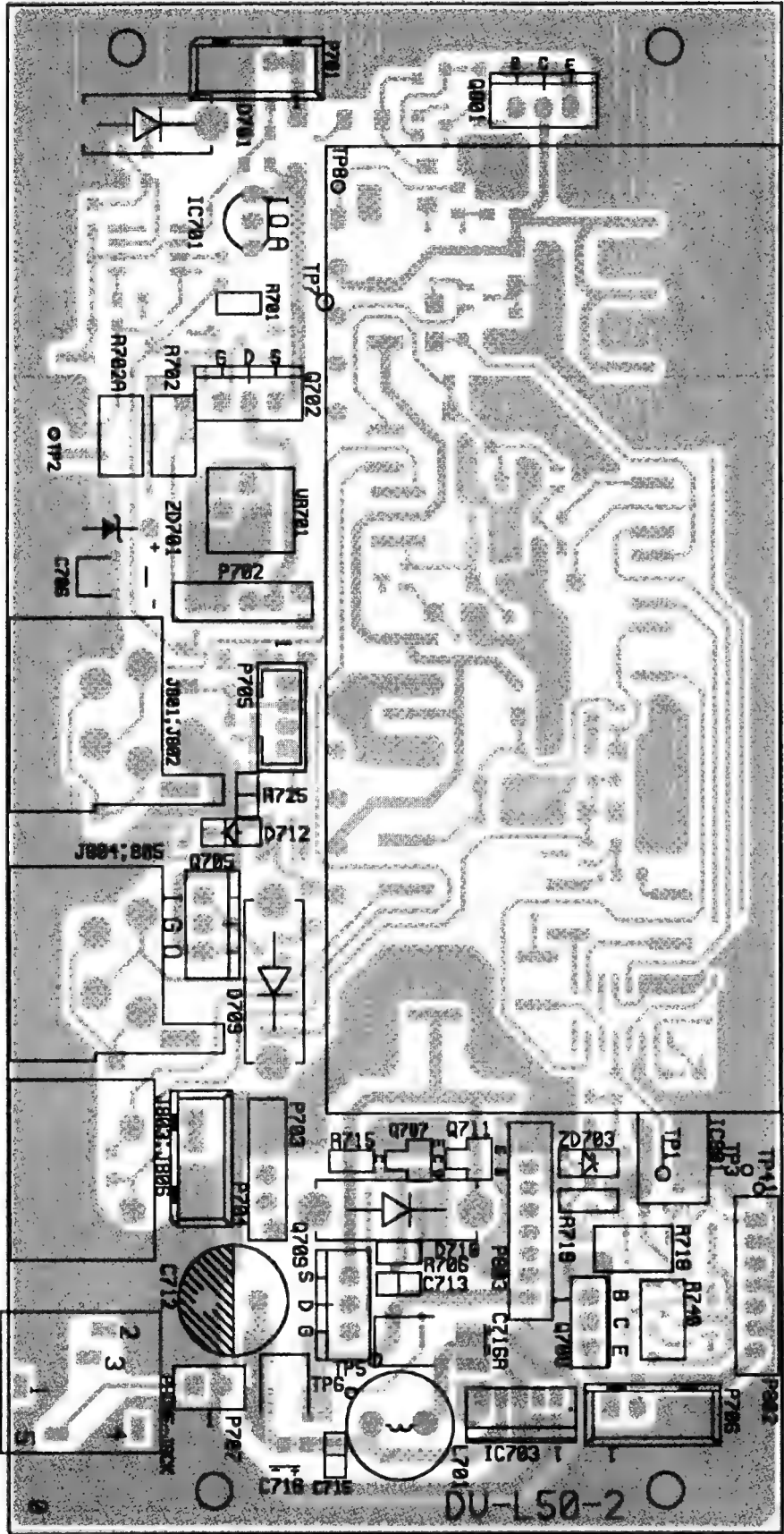


## 【 INTERFACE PWB CIRCUIT DIAGRAM 】

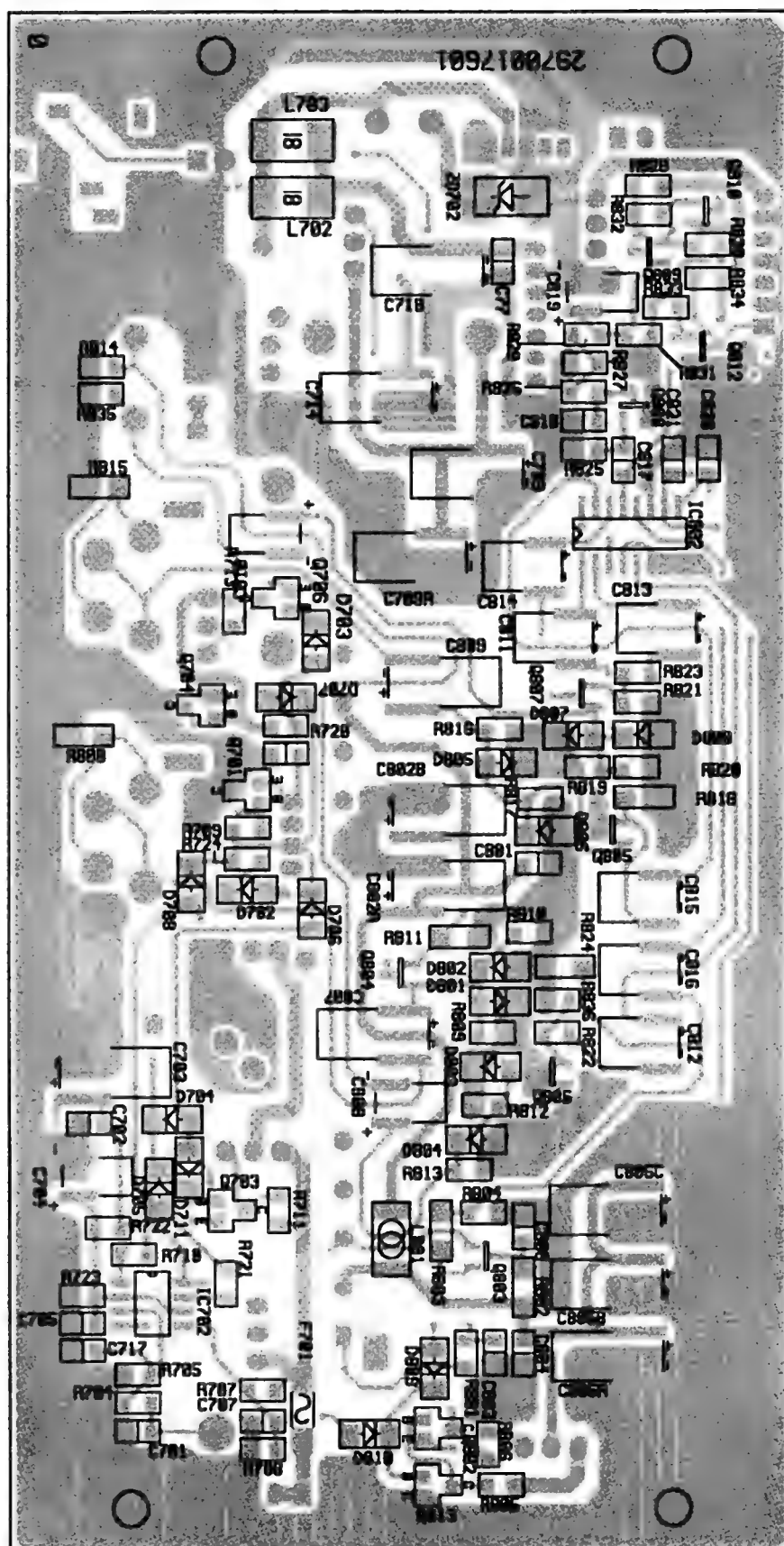




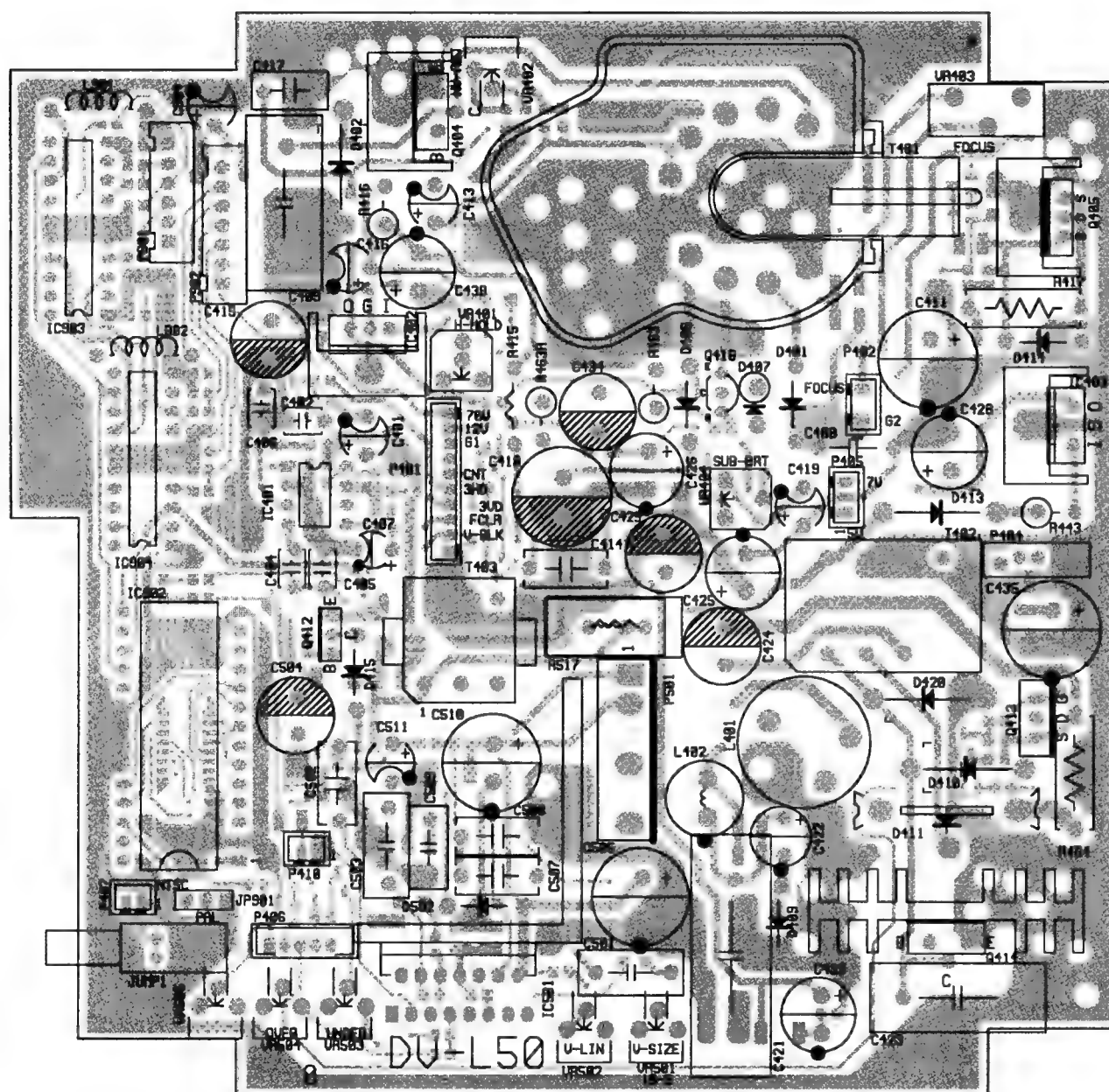
【 INTERFACE PWB PATTERN PARTS SIDE 】



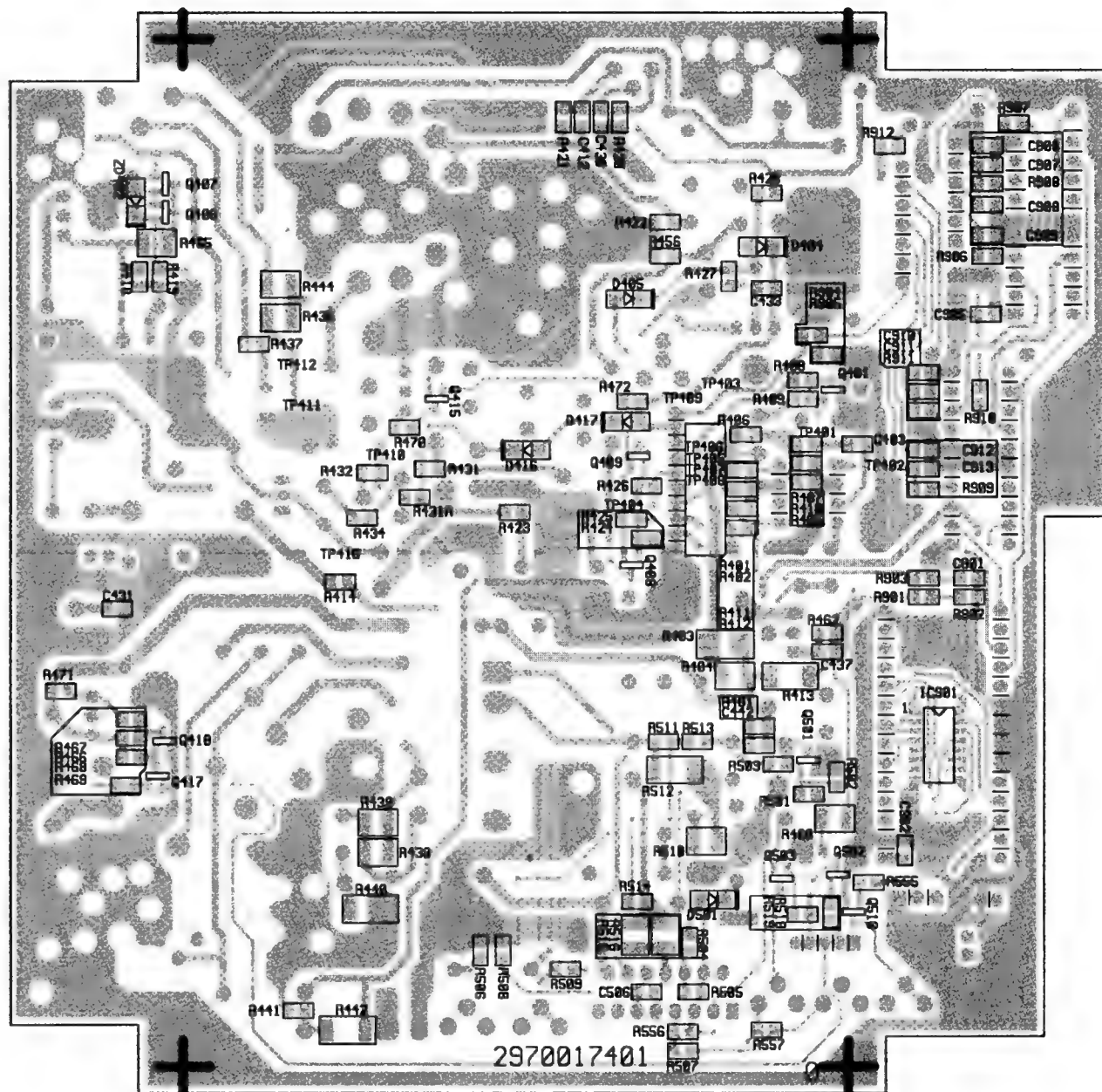
## 【 INTERFACE PWB PATTERN SOLDER SIDE 】



# 【 MAIN PWB PATTERN PARTS SIDE 】

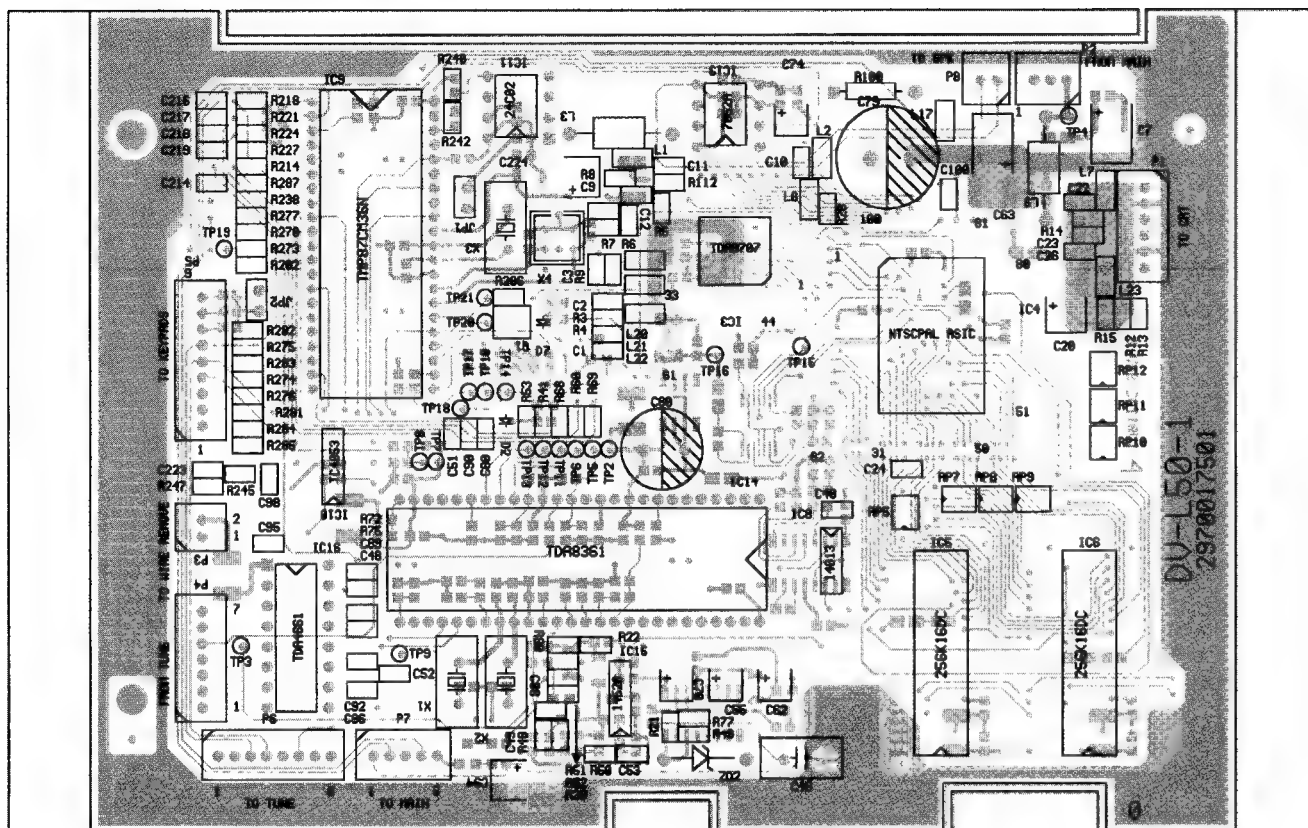


## 【 MAIN PWB PATTERN SOLDER SIDE 】

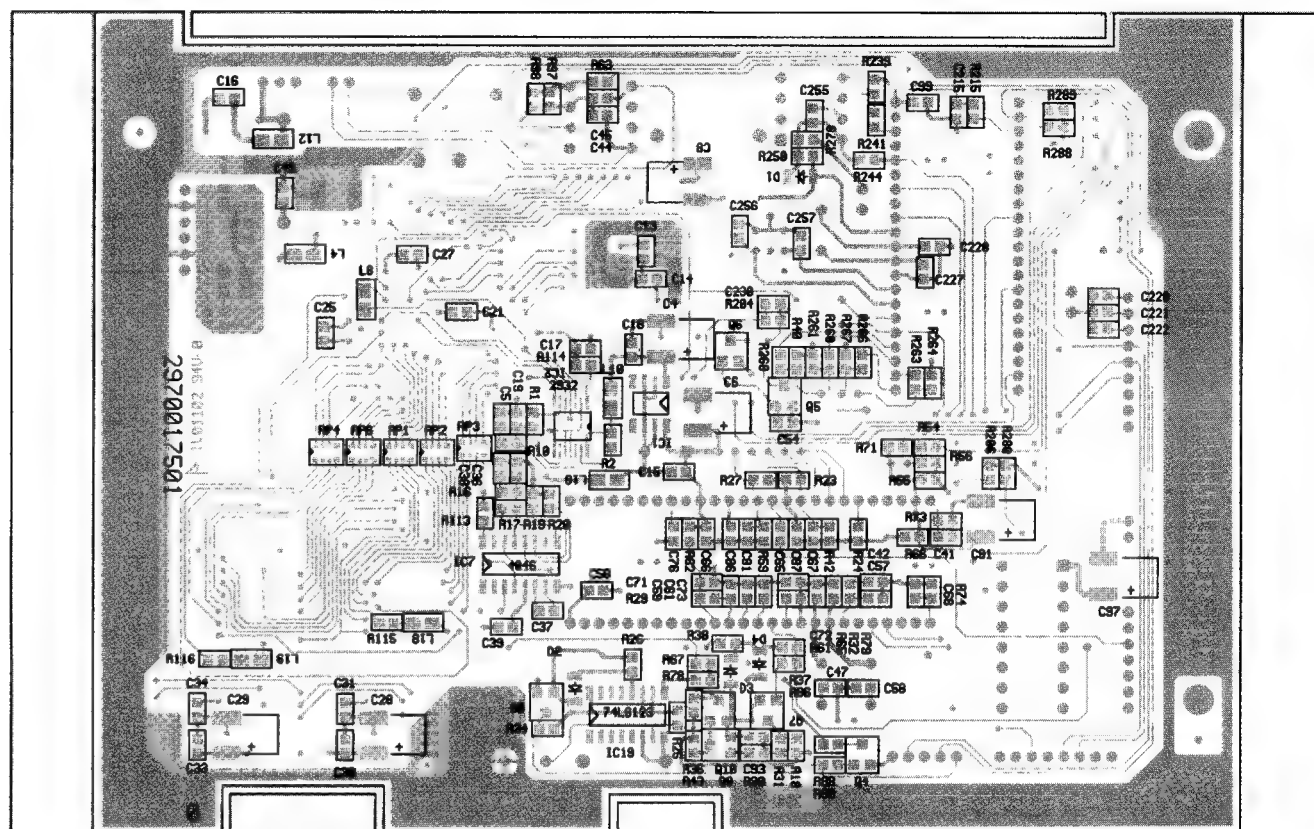




**【 VIDEO PROCESSOR PWB PATTERN PARTS SIDE 】**

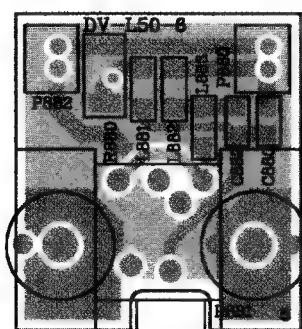
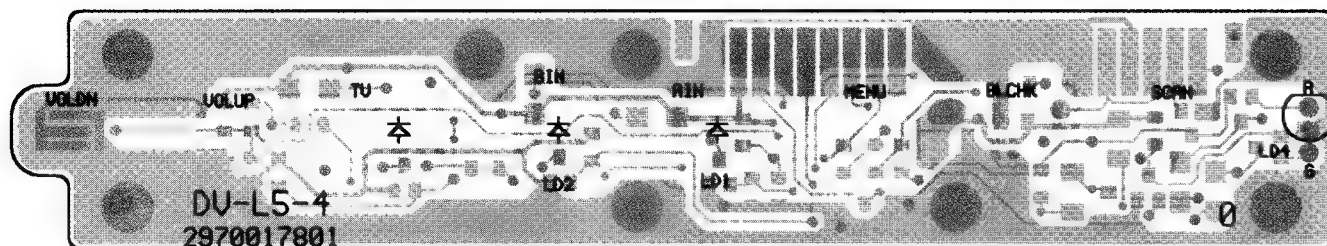


**【 VIDEO PROCESSOR PWB PATTERN SOLDER SIDE 】**

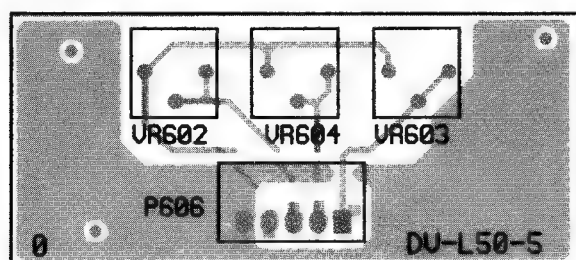




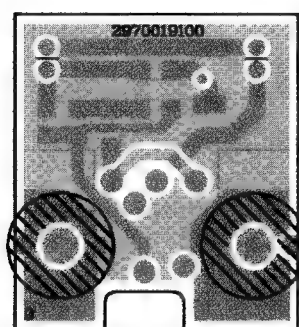
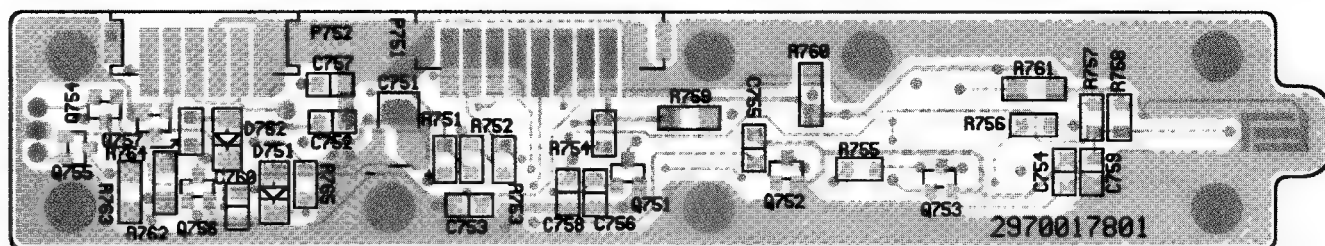
# 【 KEY VR PWB PATTERN PARTS SIDE 】



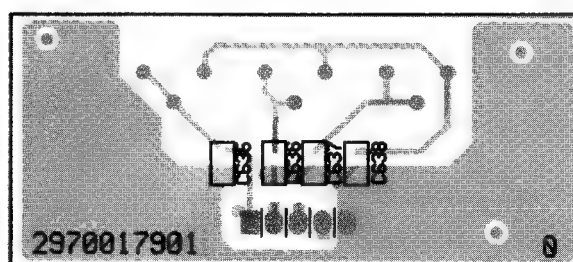
## ( RGB VR PARTS SIDE )



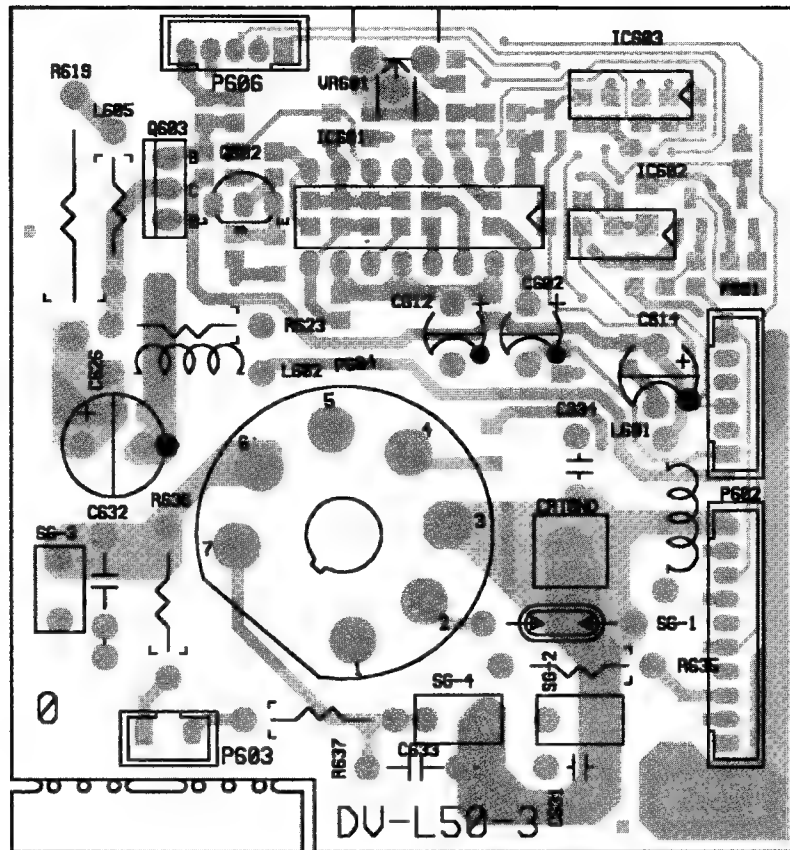
【 KEY VR PWB PATTERN SOLDER SIDE 】



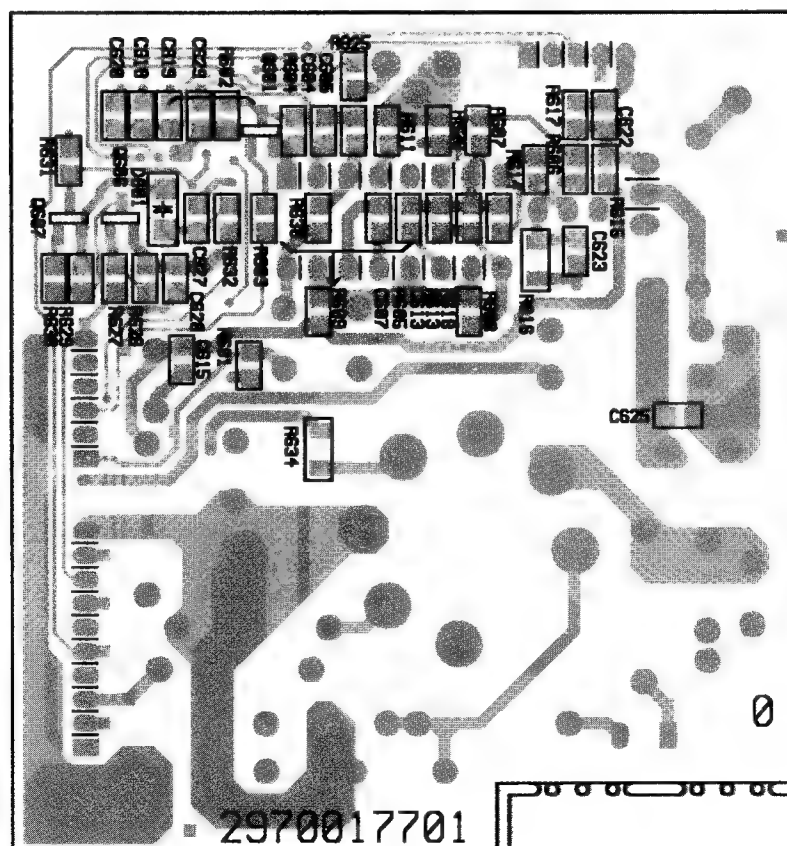
( RGB VR SOLDER SIDE )



【 CRT SOCKET PWB PATTERN PARTS SIDE 】



【 CRT SOCKET PWB PATTERN SOLDER SIDE 】





# PARTS LIST

## CAUTION

- The parts identified by the  $\Delta$  symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .

## ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
$\pm 1\%$	$\pm 2\%$	$\pm 5\%$	$\pm 10\%$	$\pm 20\%$	$\pm 30\%$	+30% -10%	+50% -10%	+80% -20%	+100% 0%

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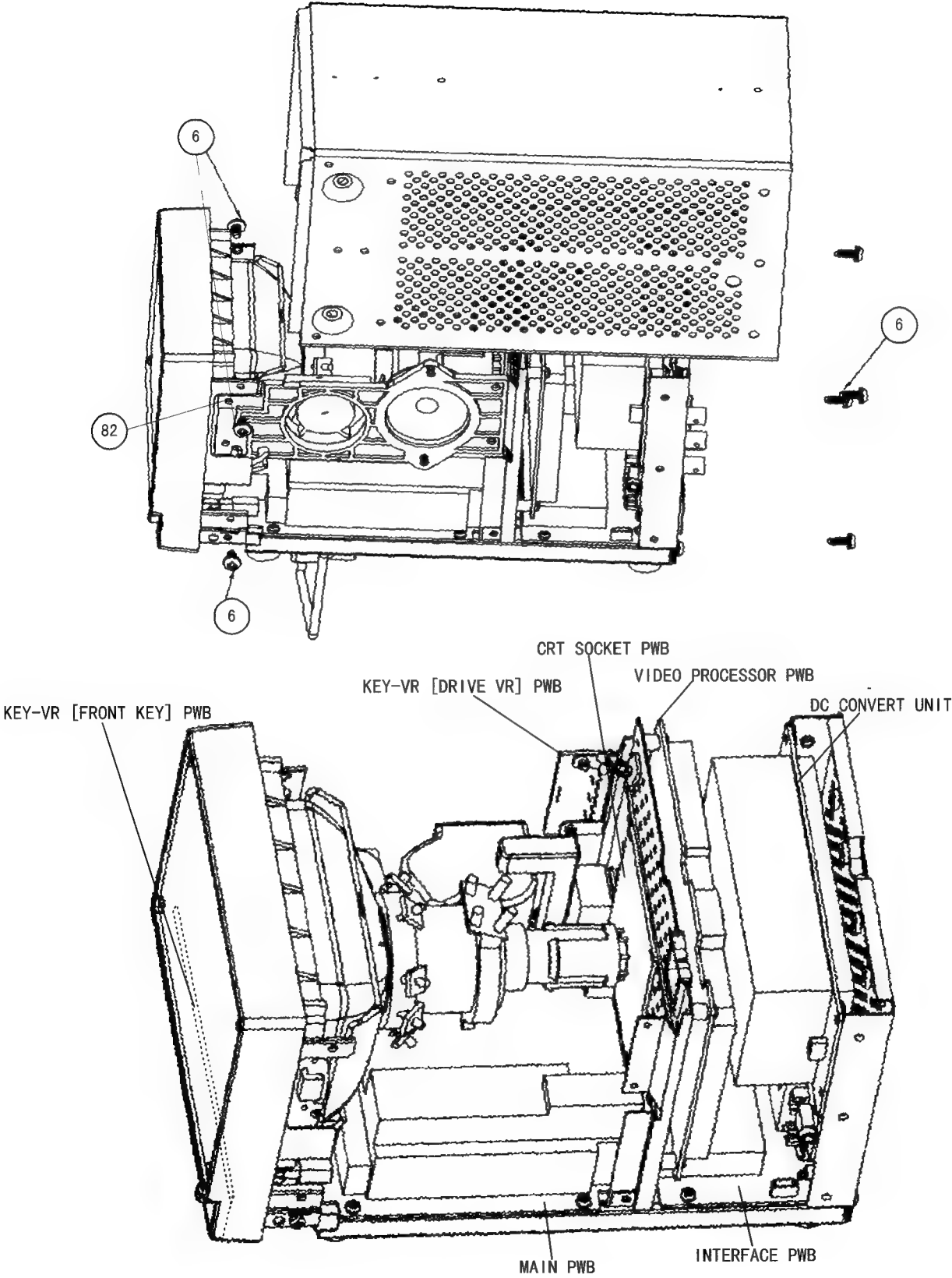
## USING P.W. BOARD

P.W.B ASS'Y \ Model	TM-L450TU
INTERFACE P.W.B	D-5600091001
KEY-VR [ DRIVE VR ] P.W.B	D-5600091004
KEY-VR [ FRONT KEY ]P.W.B	D-5600092001
EARPHONE P.W.B	D-5600091007
CRT SOCKET P.W.B	D-5600097001
VIDEO PROCESSOR P.W.B	D-5600099001
MAIN P.W.B	D-5600098001

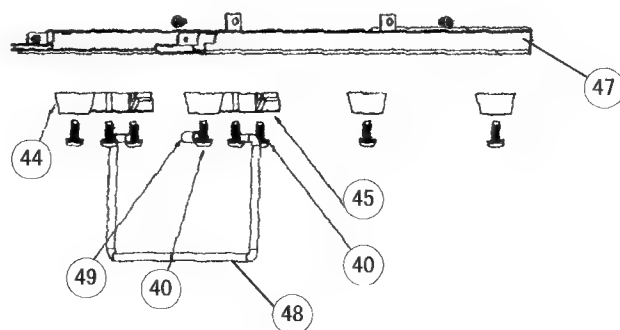
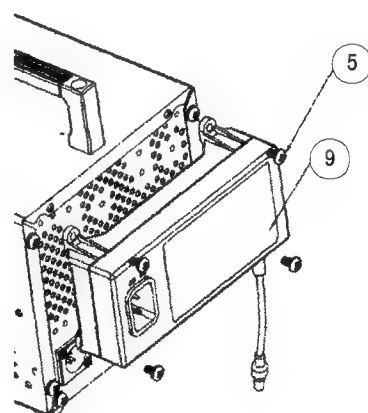
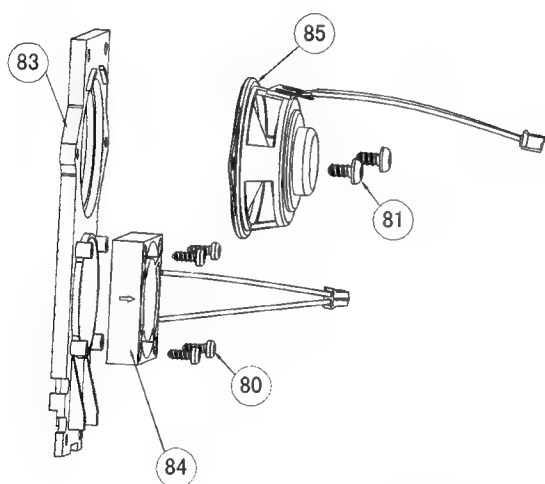
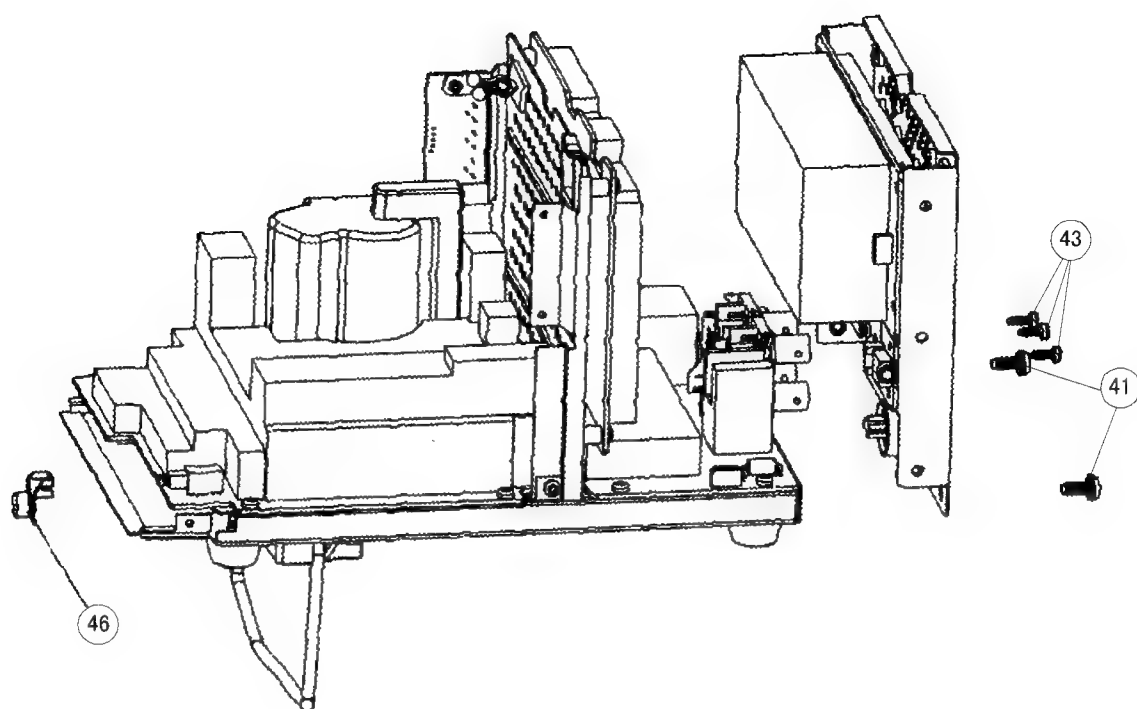
## EXPLODED VIEW PARTS LIST

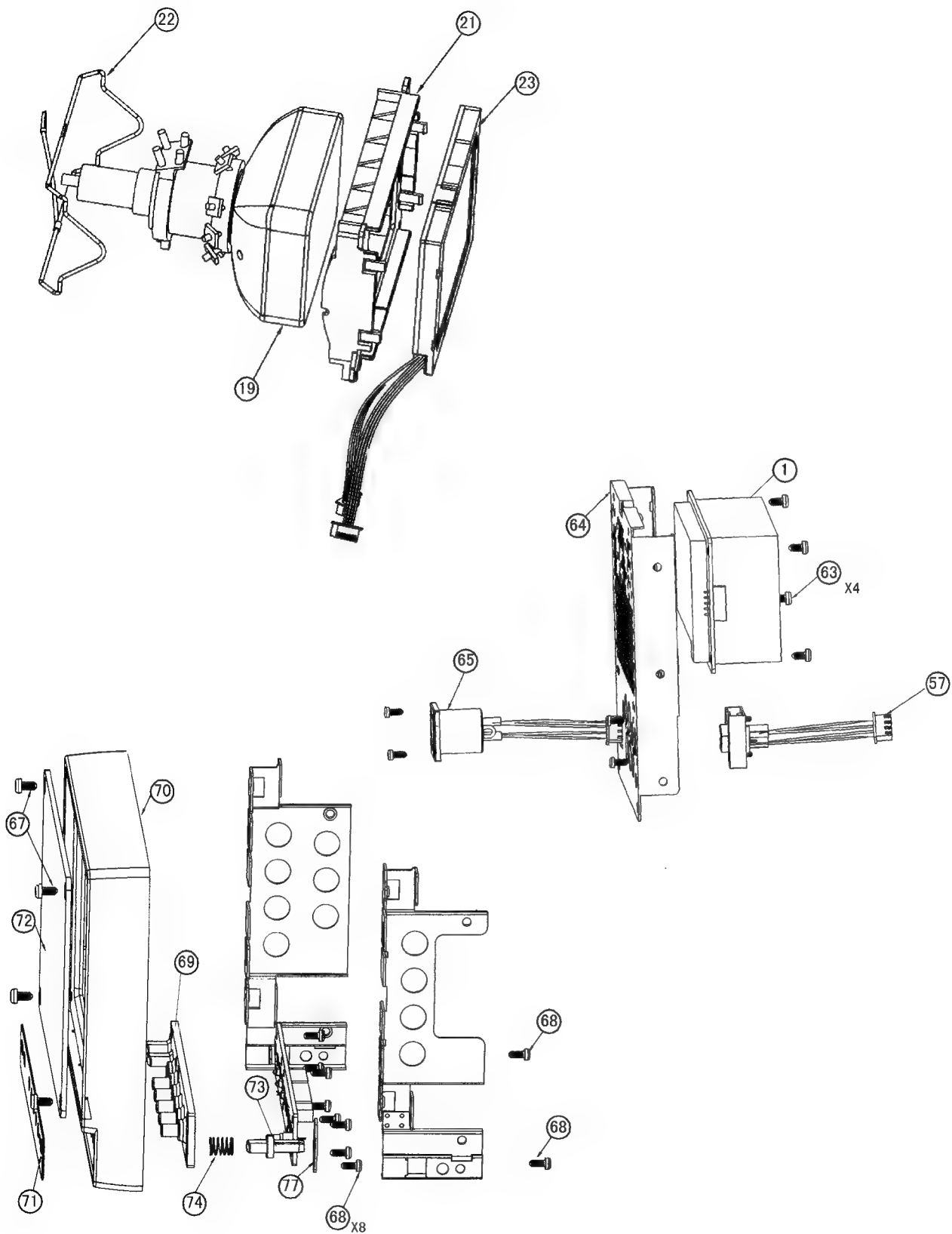
△	REF NO.	PART NO.	PART NAME	DESCRIPTION	
△	1	D-2636206300	DC-DC CONVERTER 30V 3.42A		
	5	D-3102430800	SCREW MACHINE M*4*0.7*8	FOR AC ADAPTER&REAR COVER	X4
	6	D-3102731000	SCREW M4*0.7*10 WITH LOOK WASH	FOR TOP COVER&REAR COVER/BACKET L/R	X8
	7	D-3105161300	SCREW MACHINE M5*0.8*45(NI)	FOR HANDLE	X2
△	9	D-3360147500	AC ADAPTER 19V 50W L=141 W=62		
	10	D-3371002501	CASE TOP COVER SECC T=0.8 L=22		
	11	D-3422100500	HANDLE AL L=166mm	ASMITH NO:E-40150	
△	19	D-5600091010	CRT (I.T.C)	Inc.DY	
△	21	D-3360147100	FRAME CRT PC+ABS UL94V-0		
	22	D-3730169000	CRT CLIP ASSY		
	23	D-3797000102	LCCS PANEL 5" HS		
	40	D-3102450800	SCREW M4*8 NI PLATED		X4
	41	D-3102731000	SCREW M4*0.7*10 WITH LOOK WASH		X2
	43	D-3106170400	SCREW TAP φ 3*8 ZINC BLACK ANOZ		X3
	44	D-3240907900	FOOT EVA BLACK		X4
	45	D-3360154300	STAND FOOT PC+ABS UL94V-0		X2
	46	D-3360154501	SWITCH CONNECTOR DV-L50T/L45TN		
	47	D-3371002601	BOTTOM CASE		
	48	D-3421078500	STAND STAINLESS φ 4.0 L-130		
	49	D-3520805500	PVC TUBE ID:4 OD:5.3 L:10		
△	57	D-3610169101	DC JACK ASSY		
	63	D-3100100600	SCREW MACHINE M3*0.5*6	FOR DC-DC BOARD	X4
	64	D-3371002802	REAR COVER		
△	65	D-3610169000	PLUG ASS'Y CANNON HA16RA-4P		
	67	D-3100430600	SCREW M3*6 ZINC BLACK ANOZIDE		X4
	68	D-3109092100	SCREW TAPPING 2.6*6 (NI)		X10
	69	D-3230060500	KEY PAD RUBBER KE-5140		
△	70	D-3360104800	FRONT BEZEL PC+ABS UL94V-0		
	71	D-3360147400	CONTROL SHEEY PC L=137.6		
	72	D-3360147301	ACRY BEZEL		
	73	D-3360167300	POWER KNOB PC+ABS UL94V-0		
	74	D-3421109100	SPRING SW 0.4mm		
	77	D-3421264000	BRACKET POWER KNOB SECC T=0.8		
	80	D-3106160400	SCREW TAP3*8 NI PLATED		X4
	81	D-3106164300	SCREW TAP φ 4*8 NI PLATED		X2
	82	D-3106164300	SCREW TAP φ 4*8 NI PLATED		X2
	83	D-3360154400	CASE SPEAKER PC+ABS UL94V-0		
	84	D-3620401011	FAN ASSY AFB0412LA		
	85	D-3790172900	SPEAKER ASS'Y ZEETEK NO 50Q#16		
		D-3200373200	LABEL SERIAL NUMBER		
		D-3201109200	LABEL ID DV-L45TU JVC (U.S.A)		
		D-3230054300	TUBE BINDER	FOR FBT WIRE	
		D-3240795400	INSULATOR TUBE WIRE SPIRAL		

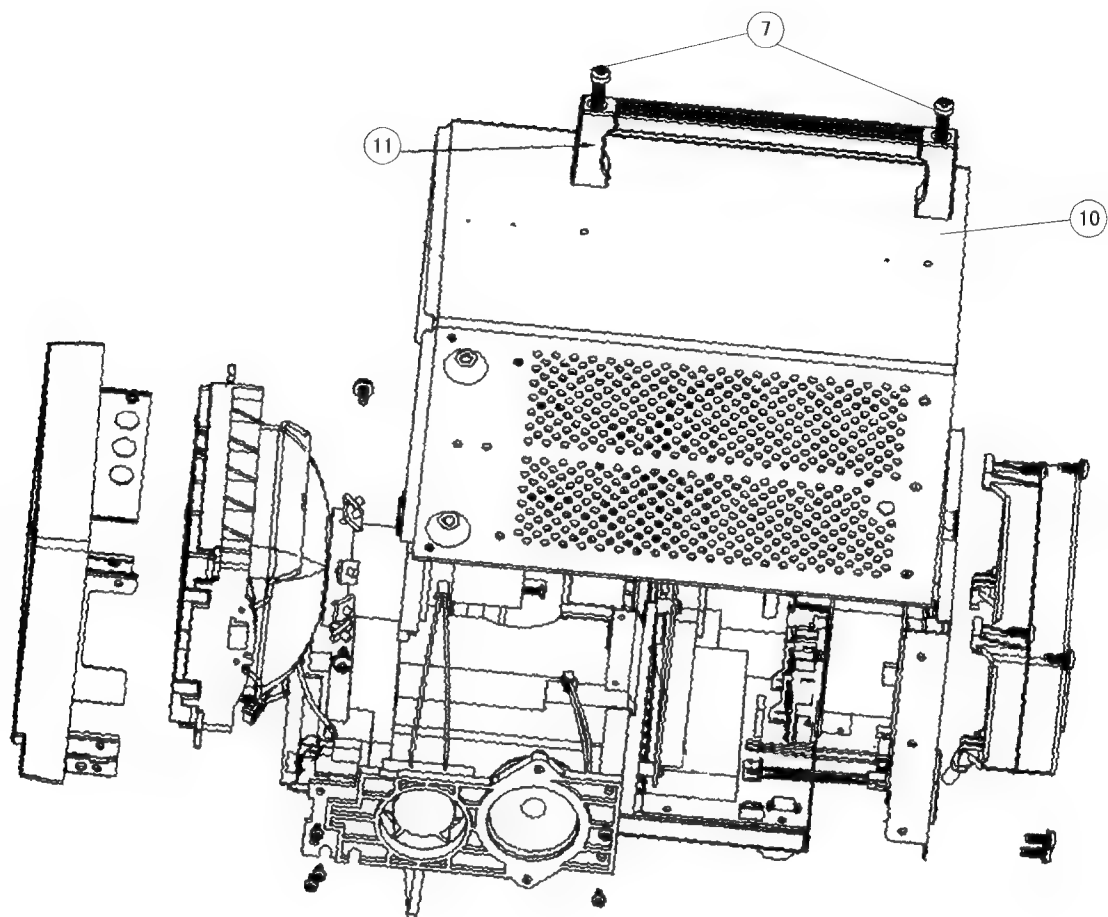
EXPLODED VIEW











# PRINTED WIRING BOARD PARTS LIST

INTERFACE P.W. BOARD ASSY (D-5600091001)

△	SYMBOL NO.	PART NO.	DESCRIPTION	△	SYMBOL NO.	PART NO.	DESCRIPTION
	<b>RESISTOR</b>				<b>RESISTOR</b>		
R719	D-0303101001	RES CH 1/8W 100 J 1206		R720	D-0343103102	RES CH 1/10W 10K J 0805	
R719	D-0303101002	RES CH 1/8W 100 J 1206		R804	D-0343103102	RES CH 1/10W 10K J 0805	
R719	D-0303101004	RES CH 1/8W 100 J 1206		R810	D-0343103102	RES CH 1/10W 10K J 0805	
R811	D-0303102001	RES CH 1/8W 1K J 1206		R817	D-0343103102	RES CH 1/10W 10K J 0805	
R818	D-0303102001	RES CH 1/8W 1K J 1206		R840	D-0343103102	RES CH 1/10W 10K J 0805	
R811	D-0303102002	RES CH 1/8W 1K J 1206		R720	D-0343103104	RES CH 1/10W 10K J 0805	
R818	D-0303102002	RES CH 1/8W 1K J 1206		R804	D-0343103104	RES CH 1/10W 10K J 0805	
R811	D-0303102004	RES CH 1/8W 1K J 1206		R810	D-0343103104	RES CH 1/10W 10K J 0805	
R818	D-0303102004	RES CH 1/8W 1K J 1206		R817	D-0343103104	RES CH 1/10W 10K J 0805	
R802	D-0303680001	RES CH 1/8W 68 J 1206		R840	D-0343103104	RES CH 1/10W 10K J 0805	
R802	D-0303680002	RES CH 1/8W 68 J 1206		R812	D-0343105101	RES CH 1/10W 1M J 0805	
R802	D-0303680004	RES CH 1/8W 68 J 1206		R813	D-0343105101	RES CH 1/10W 1M J 0805	
R808	D-0303750001	RES CH 1/8W 75 J 1206		R819	D-0343105101	RES CH 1/10W 1M J 0805	
R815	D-0303750001	RES CH 1/8W 75 J 1206		R820	D-0343105101	RES CH 1/10W 1M J 0805	
R824	D-0303750001	RES CH 1/8W 75 J 1206		R825	D-0343105101	RES CH 1/10W 1M J 0805	
R808	D-0303750002	RES CH 1/8W 75 J 1206		R812	D-0343105102	RES CH 1/10W 1M J 0805	
R815	D-0303750002	RES CH 1/8W 75 J 1206		R813	D-0343105102	RES CH 1/10W 1M J 0805	
R824	D-0303750002	RES CH 1/8W 75 J 1206		R819	D-0343105102	RES CH 1/10W 1M J 0805	
R808	D-0303750004	RES CH 1/8W 75 J 1206		R820	D-0343105102	RES CH 1/10W 1M J 0805	
R815	D-0303750004	RES CH 1/8W 75 J 1206		R825	D-0343105102	RES CH 1/10W 1M J 0805	
R824	D-0303750004	RES CH 1/8W 75 J 1206		R812	D-0343105104	RES CH 1/10W 1M J 0805	
R803	D-0313560001	RES CH 1/4W 56 J 1206		R813	D-0343105104	RES CH 1/10W 1M J 0805	
R803	D-0313560002	RES CH 1/4W 56 J 1206		R819	D-0343105104	RES CH 1/10W 1M J 0805	
R803	D-0313560004	RES CH 1/4W 56 J 1206		R820	D-0343105104	RES CH 1/10W 1M J 0805	
R718	D-0323330601	RES CH 1/2W 33 J 2010		R825	D-0343105104	RES CH 1/10W 1M J 0805	
R740	D-0323330601	RES CH 1/2W 33 J 2010		R706	D-0343123101	RES CH 1/10W 12K J 0805	
R718	D-0323330602	RES CH 1/2W 33 J 2010		R715	D-0343123101	RES CH 1/10W 12K J 0805	
R740	D-0323330602	RES CH 1/2W 33 J 2010		R706	D-0343123102	RES CH 1/10W 12K J 0805	
R718	D-0323330604	RES CH 1/2W 33 J 2010		R715	D-0343123102	RES CH 1/10W 12K J 0805	
R740	D-0323330604	RES CH 1/2W 33 J 2010		R706	D-0343123104	RES CH 1/10W 12K J 0805	
R702	D-0323821601	RES CH 1/2W 820 J 2010		R715	D-0343123104	RES CH 1/10W 12K J 0805	
R702A	D-0323821601	RES CH 1/2W 820 J 2010		R805	D-0343153101	RES CH 1/10W 15K J 0805	
R702	D-0323821602	RES CH 1/2W 820 J 2010		R805	D-0343153102	RES CH 1/10W 15K J 0805	
R702A	D-0323821602	RES CH 1/2W 820 J 2010		R805	D-0343153104	RES CH 1/10W 15K J 0805	
R702	D-0323821604	RES CH 1/2W 820 J 2010		R837	D-0343202101	RES CH 1/10W 2K J 0805	
R702A	D-0323821604	RES CH 1/2W 820 J 2010		R838	D-0343202101	RES CH 1/10W 2K J 0805	
R705	D-0341067101	RES CH 1/10W 22K F 0805		R837	D-0343202102	RES CH 1/10W 2K J 0805	
R708	D-0341067101	RES CH 1/10W 22K F 0805		R838	D-0343202102	RES CH 1/10W 2K J 0805	
R705	D-0341067102	RES CH 1/10W 22K F 0805		R837	D-0343202104	RES CH 1/10W 2K J 0805	
R708	D-0341067102	RES CH 1/10W 22K F 0805		R838	D-0343202104	RES CH 1/10W 2K J 0805	
R705	D-0341067104	RES CH 1/10W 22K F 0805		R713	D-0343223101	RES CH 1/10W 22K J 0805	
R708	D-0341067104	RES CH 1/10W 22K F 0805		R809	D-0343223101	RES CH 1/10W 22K J 0805	
R704	D-0341087101	RES CH 1/10W 100K F 0805		R816	D-0343223101	RES CH 1/10W 22K J 0805	
R723	D-0341087101	RES CH 1/10W 100K F 0805		R713	D-0343223102	RES CH 1/10W 22K J 0805	
R704	D-0341087102	RES CH 1/10W 100K F 0805		R809	D-0343223102	RES CH 1/10W 22K J 0805	
R723	D-0341087102	RES CH 1/10W 100K F 0805		R816	D-0343223102	RES CH 1/10W 22K J 0805	
R704	D-0341087104	RES CH 1/10W 100K F 0805		R713	D-0343223104	RES CH 1/10W 22K J 0805	
R723	D-0341087104	RES CH 1/10W 100K F 0805		R809	D-0343223104	RES CH 1/10W 22K J 0805	
R722	D-0341095101	RES CH 1/10W 221K F 0805		R816	D-0343223104	RES CH 1/10W 22K J 0805	
R722	D-0341095102	RES CH 1/10W 221K F 0805		R701	D-0343241101	RES CH 1/10W 240 J 0805	
R722	D-0341095104	RES CH 1/10W 221K F 0805		R701	D-0343241102	RES CH 1/10W 240 J 0805	
R707	D-0341157101	RES CH 1/10W 110K F 0805		R701	D-0343241104	RES CH 1/10W 240 J 0805	
R707	D-0341157102	RES CH 1/10W 110K F 0805		R822	D-0343242101	RES CH 1/10W 2.4K J 0805	
R707	D-0341157104	RES CH 1/10W 110K F 0805		R823	D-0343242101	RES CH 1/10W 2.4K J 0805	
R709	D-0343102101	RES CH 1/10W 1K J 0805		R822	D-0343242102	RES CH 1/10W 2.4K J 0805	
R710	D-0343102101	RES CH 1/10W 1K J 0805		R823	D-0343242102	RES CH 1/10W 2.4K J 0805	
R721	D-0343102101	RES CH 1/10W 1K J 0805		R822	D-0343242104	RES CH 1/10W 2.4K J 0805	
R806	D-0343102101	RES CH 1/10W 1K J 0805		R823	D-0343242104	RES CH 1/10W 2.4K J 0805	
R834	D-0343102101	RES CH 1/10W 1K J 0805		R830	D-0343272101	RES CH 1/10W 2.7K J 0805	
R709	D-0343102102	RES CH 1/10W 1K J 0805		R830	D-0343272102	RES CH 1/10W 2.7K J 0805	
R710	D-0343102102	RES CH 1/10W 1K J 0805		R830	D-0343272104	RES CH 1/10W 2.7K J 0805	
R721	D-0343102102	RES CH 1/10W 1K J 0805		R801	D-0343331101	RES CH 1/10W 330 J 0805	
R806	D-0343102102	RES CH 1/10W 1K J 0805		R801	D-0343331102	RES CH 1/10W 330 J 0805	
R834	D-0343102102	RES CH 1/10W 1K J 0805		R801	D-0343331104	RES CH 1/10W 330 J 0805	
R709	D-0343102104	RES CH 1/10W 1K J 0805		R839	D-0343332101	RES CH 1/10W 3.3K J 0805	
R710	D-0343102104	RES CH 1/10W 1K J 0805		R839	D-0343332102	RES CH 1/10W 3.3K J 0805	
R721	D-0343102104	RES CH 1/10W 1K J 0805		R839	D-0343332104	RES CH 1/10W 3.3K J 0805	
R806	D-0343102104	RES CH 1/10W 1K J 0805		R826	D-0343362101	RES CH 1/10W 3.6K J 0805	
R834	D-0343102104	RES CH 1/10W 1K J 0805		R826	D-0343362102	RES CH 1/10W 3.6K J 0805	
R720	D-0343103101	RES CH 1/10W 10K J 0805		R826	D-0343362104	RES CH 1/10W 3.6K J 0805	
R804	D-0343103101	RES CH 1/10W 10K J 0805		R833	D-0343433101	RES CH 1/10W 43K J 0805	
R810	D-0343103101	RES CH 1/10W 10K J 0805		R833	D-0343433102	RES CH 1/10W 43K J 0805	
R817	D-0343103101	RES CH 1/10W 10K J 0805		R833	D-0343433104	RES CH 1/10W 43K J 0805	
R840	D-0343103101	RES CH 1/10W 10K J 0805		R711	D-0343472101	RES CH 1/10W 4.7K J 0805	

△	SYMBOL NO.	PART NO.	DESCRIPTION	△	SYMBOL NO.	PART NO.	DESCRIPTION
<b>RESISTOR</b>				<b>CAPACITOR</b>			
R712	D-0343472101	RES CH 1/10W 4.7K J 0805		C801	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
R724	D-0343472101	RES CH 1/10W 4.7K J 0805		C804	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
R821	D-0343472101	RES CH 1/10W 4.7K J 0805		C820	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
R829	D-0343472101	RES CH 1/10W 4.7K J 0805		C821	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
R836	D-0343472101	RES CH 1/10W 4.7K J 0805		C701	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R711	D-0343472102	RES CH 1/10W 4.7K J 0805		C702	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R712	D-0343472102	RES CH 1/10W 4.7K J 0805		C705	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R724	D-0343472102	RES CH 1/10W 4.7K J 0805		C707	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R821	D-0343472102	RES CH 1/10W 4.7K J 0805		C713	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R829	D-0343472102	RES CH 1/10W 4.7K J 0805		C715	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R836	D-0343472102	RES CH 1/10W 4.7K J 0805		C717	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R711	D-0343472104	RES CH 1/10W 4.7K J 0805		C77	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R712	D-0343472104	RES CH 1/10W 4.7K J 0805		C801	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R724	D-0343472104	RES CH 1/10W 4.7K J 0805		C804	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R821	D-0343472104	RES CH 1/10W 4.7K J 0805		C820	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R829	D-0343472104	RES CH 1/10W 4.7K J 0805		C821	D-1512458103	CAP MC CP 50V .1U K X7R 0805	
R836	D-0343472104	RES CH 1/10W 4.7K J 0805		C701	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R814	D-0343473101	RES CH 1/10W 47K J 0805		C702	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R832	D-0343473101	RES CH 1/10W 47K J 0805		C705	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R835	D-0343473101	RES CH 1/10W 47K J 0805		C707	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R814	D-0343473102	RES CH 1/10W 47K J 0805		C713	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R832	D-0343473102	RES CH 1/10W 47K J 0805		C715	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R835	D-0343473102	RES CH 1/10W 47K J 0805		C717	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R814	D-0343473104	RES CH 1/10W 47K J 0805		C77	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R832	D-0343473104	RES CH 1/10W 47K J 0805		C801	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R835	D-0343473104	RES CH 1/10W 47K J 0805		C804	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R828	D-0343563102	RES CH 1/10W 56K J 0805		C820	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R828	D-0343563104	RES CH 1/10W 56K J 0805		C821	D-1512458109	CAP MC CP 50V .1U K X7R 0805	
R831	D-0343684101	RES CH 1/10W 680K J 0805		C803	D-1513659102	CAP MC CP 50V .22U M Y5V 0805	
R831	D-0343684102	RES CH 1/10W 680K J 0805		C806	D-1517659102	CAP MC CP 50V .22U Z Y5V 0805	
R831	D-0343684104	RES CH 1/10W 680K J 0805		C806	D-1517659103	CAP MC CP 50V .22U Z Y5V 0805	
R725	D-0343751101	RES CH 1/10W 750 J 0805		<b>DIODE</b>			
R725	D-0343751102	RES CH 1/10W 750 J 0805		ZD702	D-2020280207	DIO SBD 1A 20V DO-214AC	
R725	D-0343751104	RES CH 1/10W 750 J 0805		ZD703	D-2030023205	DIO ZEN 0.4W 8.57-9.01V LL-34	
R827	D-0343822101	RES CH 1/10W 8.2K J 0805		D702	D-2040010201	DIO SW 0.2A 75V MELF	
R827	D-0343822102	RES CH 1/10W 8.2K J 0805		D703	D-2040010201	DIO SW 0.2A 75V MELF	
R827	D-0343822104	RES CH 1/10W 8.2K J 0805		D704	D-2040010201	DIO SW 0.2A 75V MELF	
R726	D-0345104111	RES CH 1/10W 470K D 0805		D705	D-2040010201	DIO SW 0.2A 75V MELF	
<b>CAPACITOR</b>				D706	D-2040010201	DIO SW 0.2A 75V MELF	
C718	D-1483803318	CAP AL CP 10V 220U M 10.1*4.6*		D707	D-2040010201	DIO SW 0.2A 75V MELF	
C802A	D-1483803318	CAP AL CP 10V 220U M 10.1*4.6*		D708	D-2040010201	DIO SW 0.2A 75V MELF	
C802B	D-1483803318	CAP AL CP 10V 220U M 10.1*4.6*		D711	D-2040010201	DIO SW 0.2A 75V MELF	
C805A	D-1483803318	CAP AL CP 10V 220U M 10.1*4.6*		D712	D-2040010201	DIO SW 0.2A 75V MELF	
C805B	D-1483803318	CAP AL CP 10V 220U M 10.1*4.6*		D713	D-2040010201	DIO SW 0.2A 75V MELF	
C805C	D-1483803318	CAP AL CP 10V 220U M 10.1*4.6*		D801	D-2040010201	DIO SW 0.2A 75V MELF	
C807	D-1483803318	CAP AL CP 10V 220U M 10.1*4.6*		D802	D-2040010201	DIO SW 0.2A 75V MELF	
C809	D-1483803318	CAP AL CP 10V 220U M 10.1*4.6*		D803	D-2040010201	DIO SW 0.2A 75V MELF	
C704	D-1493209018	CAP AL CP 25V 10U M 6.3*3.6*3.		D804	D-2040010201	DIO SW 0.2A 75V MELF	
C706	D-1493209018	CAP AL CP 25V 10U M 6.3*3.6*3.		D805	D-2040010201	DIO SW 0.2A 75V MELF	
C808	D-1493209018	CAP AL CP 25V 10U M 6.3*3.6*3.		D806	D-2040010201	DIO SW 0.2A 75V MELF	
C810	D-1493209018	CAP AL CP 25V 10U M 6.3*3.6*3.		D807	D-2040010201	DIO SW 0.2A 75V MELF	
C819	D-1493215018	CAP AL CP 50V 1U M 6.3*3.6*3.6		D808	D-2040010201	DIO SW 0.2A 75V MELF	
C811	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.		D809	D-2040010201	DIO SW 0.2A 75V MELF	
C812	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.		D810	D-2040010201	DIO SW 0.2A 75V MELF	
C813	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.		D702	D-2040010202	DIO SW 0.2A 75V MELF	
C703	D-1493807318	CAP AL CP 16V 100U M 10.1*4.6*		D703	D-2040010202	DIO SW 0.2A 75V MELF	
C716	D-1493807318	CAP AL CP 16V 100U M 10.1*4.6*		D704	D-2040010202	DIO SW 0.2A 75V MELF	
C716A	D-1493807318	CAP AL CP 16V 100U M 10.1*4.6*		D705	D-2040010202	DIO SW 0.2A 75V MELF	
C709	D-1493811918	CAP AL CP 25V 68U M 10.1*4.6*4		D706	D-2040010202	DIO SW 0.2A 75V MELF	
C709A	D-1493811918	CAP AL CP 25V 68U M 10.1*4.6*4		D707	D-2040010202	DIO SW 0.2A 75V MELF	
C714	D-1493811918	CAP AL CP 25V 68U M 10.1*4.6*4		D708	D-2040010202	DIO SW 0.2A 75V MELF	
C818	D-1511522102	CAP MC CP 50V 47P J COG 0805		D711	D-2040010202	DIO SW 0.2A 75V MELF	
C818	D-1511522103	CAP MC CP 50V 47P J COG 0805		D712	D-2040010202	DIO SW 0.2A 75V MELF	
C818	D-1511522109	CAP MC CP 50V 47P J COG 0805		D713	D-2040010202	DIO SW 0.2A 75V MELF	
C817	D-1512454102	CAP MC CP 50V .01U K X7R 0805		D801	D-2040010202	DIO SW 0.2A 75V MELF	
C817	D-1512454103	CAP MC CP 50V .01U K X7R 0805		D802	D-2040010202	DIO SW 0.2A 75V MELF	
C817	D-1512454109	CAP MC CP 50V .01U K X7R 0805		D803	D-2040010202	DIO SW 0.2A 75V MELF	
C701	D-1512458102	CAP MC CP 50V .1U K X7R 0805		D804	D-2040010202	DIO SW 0.2A 75V MELF	
C702	D-1512458102	CAP MC CP 50V .1U K X7R 0805		D805	D-2040010202	DIO SW 0.2A 75V MELF	
C705	D-1512458102	CAP MC CP 50V .1U K X7R 0805		D806	D-2040010202	DIO SW 0.2A 75V MELF	
C707	D-1512458102	CAP MC CP 50V .1U K X7R 0805		D807	D-2040010202	DIO SW 0.2A 75V MELF	
C713	D-1512458102	CAP MC CP 50V .1U K X7R 0805		D808	D-2040010202	DIO SW 0.2A 75V MELF	
C715	D-1512458102	CAP MC CP 50V .1U K X7R 0805		D809	D-2040010202	DIO SW 0.2A 75V MELF	
C717	D-1512458102	CAP MC CP 50V .1U K X7R 0805		D810	D-2040010202	DIO SW 0.2A 75V MELF	
C77	D-1512458102	CAP MC CP 50V .1U K X7R 0805		D702	D-2040010203	DIO SW .3A 75V MELF	

△	SYMBOL NO.	PART NO.	DESCRIPTION	△	SYMBOL NO.	PART NO.	DESCRIPTION
<b>DIODE</b>				<b>TRANSISTOR</b>			
D703	D-2040010203	DIO SW .3A 75V MELF		Q808	D-2140018001	TR 40V 0.2A SOT23	
D704	D-2040010203	DIO SW .3A 75V MELF		Q810	D-2140018001	TR 40V 0.2A SOT23	
D705	D-2040010203	DIO SW .3A 75V MELF		Q701	D-2140018002	TR 40V 0.2A SOT23	
D706	D-2040010203	DIO SW .3A 75V MELF		Q808	D-2140018002	TR 40V 0.2A SOT23	
D707	D-2040010203	DIO SW .3A 75V MELF		Q810	D-2140018002	TR 40V 0.2A SOT23	
D708	D-2040010203	DIO SW .3A 75V MELF		Q701	D-2140018003	TR 40V 0.2A SOT23	
D711	D-2040010203	DIO SW .3A 75V MELF		Q808	D-2140018003	TR 40V 0.2A SOT23	
D712	D-2040010203	DIO SW .3A 75V MELF		Q810	D-2140018003	TR 40V 0.2A SOT23	
D713	D-2040010203	DIO SW .3A 75V MELF		Q703	D-2140043506	TR 50V .1A SC-59	
D801	D-2040010203	DIO SW .3A 75V MELF		Q704	D-2140043506	TR 50V .1A SC-59	
D802	D-2040010203	DIO SW .3A 75V MELF		Q706	D-2140043506	TR 50V .1A SC-59	
D803	D-2040010203	DIO SW .3A 75V MELF		Q707	D-2140043506	TR 50V .1A SC-59	
D804	D-2040010203	DIO SW .3A 75V MELF		Q711	D-2140043506	TR 50V .1A SC-59	
D805	D-2040010203	DIO SW .3A 75V MELF		Q802	D-2140043506	TR 50V .1A SC-59	
D806	D-2040010203	DIO SW .3A 75V MELF		Q812	D-2140043506	TR 50V .1A SC-59	
D807	D-2040010203	DIO SW .3A 75V MELF		Q813	D-2140043506	TR 50V .1A SC-59	
D808	D-2040010203	DIO SW .3A 75V MELF		<b>IC</b>			
D809	D-2040010203	DIO SW .3A 75V MELF		IC702	D-2520008101	IC OP AMP SO-8PIN	
D810	D-2040010203	DIO SW .3A 75V MELF		IC702	D-2520008108	IC OP AMP SO-8PIN	
D702	D-2040010204	DIO SW 0.2A 75V LL-34		IC702	D-2520008110	IC OP AMP SO-8PIN	
D703	D-2040010204	DIO SW 0.2A 75V LL-34		IC702	D-2520008111	IC OP AMP SO-8PIN	
D704	D-2040010204	DIO SW 0.2A 75V LL-34		IC802	D-2610034107	IC MULTIPLEX/DEMULPLEX SO-16	
D705	D-2040010204	DIO SW 0.2A 75V LL-34		<b>COIL</b>			
D706	D-2040010204	DIO SW 0.2A 75V LL-34		L702	D-2921120204	CORE BEAD 4.2*3.2*2.6 CHIP	
D707	D-2040010204	DIO SW 0.2A 75V LL-34		L703	D-2921120204	CORE BEAD 4.2*3.2*2.6 CHIP	
D708	D-2040010204	DIO SW 0.2A 75V LL-34		L801	D-2921120204	CORE BEAD 4.2*3.2*2.6 CHIP	
D711	D-2040010204	DIO SW 0.2A 75V LL-34		<b>OTHER</b>			
D712	D-2040010204	DIO SW 0.2A 75V LL-34		△ F701	D-0868211001	FUSE F/SMD 7A 125V 2410	
D713	D-2040010204	DIO SW 0.2A 75V LL-34		<b>VR</b>			
D801	D-2040010204	DIO SW 0.2A 75V LL-34		VR701	D-0604202005	RES VR HORI 2K K	
D802	D-2040010204	DIO SW 0.2A 75V LL-34		<b>CAPACITOR</b>			
D803	D-2040010204	DIO SW 0.2A 75V LL-34		C712	D-1430803505	CAP AL 10V 470U M 8*12.5	
D804	D-2040010204	DIO SW 0.2A 75V LL-34		C712	D-1430803507	CAP AL 10V 470U M 8*11.5	
D805	D-2040010204	DIO SW 0.2A 75V LL-34		<b>DIODE</b>			
D806	D-2040010204	DIO SW 0.2A 75V LL-34		△ D709	D-2020080402	DIO SBD 3A 40V D201	
D807	D-2040010204	DIO SW 0.2A 75V LL-34		△ D710	D-2020080402	DIO SBD 3A 40V D201	
D808	D-2040010204	DIO SW 0.2A 75V LL-34		ZD701	D-2030120816	DIO ZEN .5W 4.9-5.1V D35	
D809	D-2040010204	DIO SW 0.2A 75V LL-34		D701	D-2050011001	DIO SI 1A 100V D41	
D810	D-2040010204	DIO SW 0.2A 75V LL-34		D701	D-2050011011	DIO SI 1A 100V D15	
<b>TRANSISTOR</b>				<b>TRANSISTOR</b>			
Q803	D-2140017001	TR 40V 0.2A SOT23		Q708	D-2100070010	TR 60V 3A 2045	
Q804	D-2140017001	TR 40V 0.2A SOT23		Q801	D-2130017007	TR -6A -85V TO-220	
Q805	D-2140017001	TR 40V 0.2A SOT23		△ Q702	D-2420023010	FET -55V -74A TO-220AB	
Q806	D-2140017001	TR 40V 0.2A SOT23		△ Q705	D-2420023010	FET -55V -74A TO-220AB	
Q807	D-2140017001	TR 40V 0.2A SOT23		△ Q709	D-2420023010	FET -55V -74A TO-220AB	
Q809	D-2140017001	TR 40V 0.2A SOT23		<b>IC</b>			
Q803	D-2140017002	TR 40V 0.2A SOT23		IC701	D-2500002213	IC VOL ADJ T92 3PIN	
Q804	D-2140017002	TR 40V 0.2A SOT23		IC703	D-2500057111	IC REGU 1.23~57V 1A TO220 SLEA	
Q805	D-2140017002	TR 40V 0.2A SOT23		<b>OTHER</b>			
Q806	D-2140017002	TR 40V 0.2A SOT23		△ L701	D-2320500418	TUNER NTSC VIDEO	
Q807	D-2140017002	TR 40V 0.2A SOT23			D-2816315210	CHOKE CD-8 430uH	
Q809	D-2140017002	TR 40V 0.2A SOT23			D-3071519900	PHONE JACK 5P	
Q803	D-2140017003	TR 40V 0.2A SOT23			D-3072203200	CONN BNC 1*2 WITH SWITCH	
Q804	D-2140017003	TR 40V 0.2A SOT23			D-3072203200	CONN BNC 1*2 WITH SWITCH	
Q805	D-2140017003	TR 40V 0.2A SOT23			D-3072203300	CONN RCA JACK 1*2	
Q806	D-2140017003	TR 40V 0.2A SOT23					
Q807	D-2140017003	TR 40V 0.2A SOT23					
Q809	D-2140017003	TR 40V 0.2A SOT23					
Q701	D-2140018001	TR 40V 0.2A SOT23					

## KEY-VR [DRIVE VR] P.W.BOARD ASSY (D-5600091004)

△ SYMBOL NO.	PART NO.	DESCRIPTION
<b>VR</b>		
VR602	D-0607411005	RES VR HORI 3K K
VR603	D-0607411005	RES VR HORI 3K K
VR604	D-0607411005	RES VR HORI 3K K
<b>CAPACITOR</b>		
C635	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C636	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C637	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C638	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C635	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C636	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C637	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C638	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C635	D-1512458109	CAP MC CP 50V .1U K X7R 0805
C636	D-1512458109	CAP MC CP 50V .1U K X7R 0805
C637	D-1512458109	CAP MC CP 50V .1U K X7R 0805
C638	D-1512458109	CAP MC CP 50V .1U K X7R 0805

## KEY-VR [FRONT KEY] P.W.BOARD ASSY (D-5600092001)

△ SYMBOL NO.	PART NO.	DESCRIPTION
<b>CAPACITOR</b>		
C751	D-1493209018	CAP AL CP 25V 10U M 6.3*3.6*3.
<b>RESISTOR</b>		
R759	D-0313471001	RES CH 1/4W 470 J 1206
R760	D-0313471001	RES CH 1/4W 470 J 1206
R761	D-0313471001	RES CH 1/4W 470 J 1206
R762	D-0313471001	RES CH 1/4W 470 J 1206
R763	D-0313471001	RES CH 1/4W 470 J 1206
R759	D-0313471002	RES CH 1/4W 470 J 1206
R760	D-0313471002	RES CH 1/4W 470 J 1206
R761	D-0313471002	RES CH 1/4W 470 J 1206
R762	D-0313471002	RES CH 1/4W 470 J 1206
R763	D-0313471002	RES CH 1/4W 470 J 1206
R759	D-0313471004	RES CH 1/4W 470 J 1206
R760	D-0313471004	RES CH 1/4W 470 J 1206
R761	D-0313471004	RES CH 1/4W 470 J 1206
R762	D-0313471004	RES CH 1/4W 470 J 1206
R763	D-0313471004	RES CH 1/4W 470 J 1206
R753	D-0343103101	RES CH 1/10W 10K J 0805
R757	D-0343103101	RES CH 1/10W 10K J 0805
R765	D-0343103101	RES CH 1/10W 10K J 0805
R753	D-0343103102	RES CH 1/10W 10K J 0805
R757	D-0343103102	RES CH 1/10W 10K J 0805
R765	D-0343103102	RES CH 1/10W 10K J 0805
R753	D-0343103104	RES CH 1/10W 10K J 0805
R757	D-0343103104	RES CH 1/10W 10K J 0805
R765	D-0343103104	RES CH 1/10W 10K J 0805
R752	D-0343223101	RES CH 1/10W 22K J 0805
R756	D-0343223101	RES CH 1/10W 22K J 0805
R752	D-0343223102	RES CH 1/10W 22K J 0805
R756	D-0343223102	RES CH 1/10W 22K J 0805
R752	D-0343223104	RES CH 1/10W 22K J 0805
R756	D-0343223104	RES CH 1/10W 22K J 0805
R754	D-0343333101	RES CH 1/10W 33K J 0805
R758	D-0343333101	RES CH 1/10W 33K J 0805
R754	D-0343333102	RES CH 1/10W 33K J 0805
R758	D-0343333102	RES CH 1/10W 33K J 0805
R754	D-0343333104	RES CH 1/10W 33K J 0805
R758	D-0343333104	RES CH 1/10W 33K J 0805
R764	D-0343472101	RES CH 1/10W 4.7K J 0805
R764	D-0343472102	RES CH 1/10W 4.7K J 0805
R764	D-0343472104	RES CH 1/10W 4.7K J 0805
R751	D-0343683101	RES CH 1/10W 68K J 0805
R755	D-0343683101	RES CH 1/10W 68K J 0805
R751	D-0343683102	RES CH 1/10W 68K J 0805
R755	D-0343683102	RES CH 1/10W 68K J 0805
R751	D-0343683104	RES CH 1/10W 68K J 0805
R755	D-0343683104	RES CH 1/10W 68K J 0805

△ SYMBOL NO.	PART NO.	DESCRIPTION
<b>CAPACITOR</b>		
C752	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C753	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C754	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C755	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C756	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C757	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C758	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C759	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C760	D-1512458102	CAP MC CP 50V .1U K X7R 0805
C752	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C753	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C754	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C755	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C756	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C757	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C758	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C759	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C760	D-1512458103	CAP MC CP 50V .1U K X7R 0805
C752	D-1512458109	CAP MC CP 50V .1U K X7R 0805
C753	D-1512458109	CAP MC CP 50V .1U K X7R 0805
C754	D-1512458109	CAP MC CP 50V .1U K X7R 0805
C755	D-1512458109	CAP MC CP 50V .1U K X7R 0805
C756	D-1512458109	CAP MC CP 50V .1U K X7R 0805
C757	D-1512458109	CAP MC CP 50V .1U K X7R 0805
C758	D-1512458109	CAP MC CP 50V .1U K X7R 0805
C759	D-1512458109	CAP MC CP 50V .1U K X7R 0805
C760	D-1512458109	CAP MC CP 50V .1U K X7R 0805
<b>DIODE</b>		
D751	D-2040010201	DIO SW 0.2A 75V MELF
D752	D-2040010201	DIO SW 0.2A 75V MELF
D751	D-2040010202	DIO SW 0.2A 75V MELF
D752	D-2040010202	DIO SW 0.2A 75V MELF
D751	D-2040010203	DIO SW .3A 75V MELF
D752	D-2040010203	DIO SW .3A 75V MELF
D751	D-2040010204	DIO SW 0.2A 75V LL-34
D752	D-2040010204	DIO SW 0.2A 75V LL-34
LD1	D-2300531506	LED GREEN 1.9mm SMD
LD2	D-2300531506	LED GREEN 1.9mm SMD
LD3	D-2300531506	LED GREEN 1.9mm SMD
LD4	D-2301122406	LED GRN/RED 3mm
<b>TRANSISTOR</b>		
Q751	D-2140043506	TR 50V .1A SC-59
Q752	D-2140043506	TR 50V .1A SC-59
Q753	D-2140043506	TR 50V .1A SC-59
Q754	D-2140043506	TR 50V .1A SC-59
Q755	D-2140043506	TR 50V .1A SC-59
Q756	D-2140043506	TR 50V .1A SC-59
Q757	D-2140043506	TR 50V .1A SC-59

## EARPHONE P.W.BOARD ASSY (D-5600091007)

△	SYMBOL NO.	PART NO.	DESCRIPTION
<b>RESISTOR</b>			
R881	D-0313471001	RES CH 1/4W 470 J 1206	
R881	D-0313471002	RES CH 1/4W 470 J 1206	
R881	D-0313471004	RES CH 1/4W 470 J 1206	
<b>CAPACITOR</b>			
C880	D-1511545102	CAP MC CP 50V 1KP J COG 0805	
C882	D-1511545102	CAP MC CP 50V 1KP J COG 0805	
C880	D-1511545103	CAP MC CP 50V 1KP J COG 0805	
C882	D-1511545103	CAP MC CP 50V 1KP J COG 0805	
C880	D-1511545109	CAP MC CP 50V 1KP J COG 0805	
C882	D-1511545109	CAP MC CP 50V 1KP J COG 0805	
<b>COIL</b>			
L881	D-2921111322	CORE BEAD 1206 SMD	
<b>OTHER</b>			
	D-3072203800	CONN JACK	

## CRT SOCKET P.W.BOARD ASSY (D-5600097001)

△	SYMBOL NO.	PART NO.	DESCRIPTION
<b>RESISTOR</b>			
R636	D-0123104822	RES MOF 1/2W 100K J SMALL	
R637	D-0123104822	RES MOF 1/2W 100K J SMALL	
R623	D-0123221822	RES MOF 1/2W 220 J SMALL	
R635	D-0123472822	RES MOF 1/2W 4.7K J SMALL	
<b>CAPACITOR</b>			
C632	D-1142354401	CAP CD 1KV .01U M Z5U K10	
C633	D-1142354401	CAP CD 1KV .01U M Z5U K10	
C632	D-1142354403	CAP CD 1KV .01U M Z5U K10	
C633	D-1142354403	CAP CD 1KV .01U M Z5U K10	
C631	D-1142942801	CAP CD 1KV 470P K Y5P TP5	
C631	D-1142942803	CAP CD 1KV 470P K Y5P TP5	
C614	D-1432309103	CAP AL 25V 100U M 6.3*11 TP	
C614	D-1432309105	CAP AL 25V 100U M 6.3*11 TP	
C614	D-1432309107	CAP AL 25V 100U M 6.3*11 TP	
C612	D-1432309505	CAP AL 25V 47U M 5*11.5 TP	
C612	D-1432309507	CAP AL 25V 47U M 5*11 TP	
C602	D-1432312007	CAP AL 35V 10U M 5*11 TP	
C626	D-1432322005	CAP AL 100V 22U M 8*11.5 TP	
C626	D-1432322007	CAP AL 100V 22U M 8*11.5 TP	
<b>TRANSISTOR</b>			
Q602	D-2100063013	TR 40V 0.5A T92	
<b>COIL</b>			
L601	D-2922280006	PEAKING COIL 100uH K TP AXIAL	
L602	D-2922280006	PEAKING COIL 100uH K TP AXIAL	
L605	D-2922320014	COIL PEAKING 15uH K TP	
<b>RESISTOR</b>			
R616	D-0313101001	RES CH 1/4W 100 J 1206	
R616	D-0313101002	RES CH 1/4W 100 J 1206	
R616	D-0313101004	RES CH 1/4W 100 J 1206	
R634	D-0313228001	RES CH 1/4W 2.2 J 1206	
R634	D-0313228004	RES CH 1/4W 2.2 J 1206	
R606	D-0341111101	RES CH 1/10W 49.9K F 0805	
R606	D-0341111102	RES CH 1/10W 49.9K F 0805	
R606	D-0341111104	RES CH 1/10W 49.9K F 0805	
R608	D-0341399101	RES CH 1/10W 7.15K F 0805	
R608	D-0341399104	RES CH 1/10W 7.15K F 0805	
R611	D-0343102101	RES CH 1/10W 1K J 0805	
R625	D-0343102101	RES CH 1/10W 1K J 0805	
R611	D-0343102102	RES CH 1/10W 1K J 0805	
R625	D-0343102102	RES CH 1/10W 1K J 0805	
R611	D-0343102104	RES CH 1/10W 1K J 0805	
R625	D-0343102104	RES CH 1/10W 1K J 0805	
R615	D-0343103101	RES CH 1/10W 10K J 0805	
R617	D-0343103101	RES CH 1/10W 10K J 0805	
R632	D-0343103101	RES CH 1/10W 10K J 0805	
R638	D-0343103101	RES CH 1/10W 10K J 0805	
R615	D-0343103102	RES CH 1/10W 10K J 0805	
R617	D-0343103102	RES CH 1/10W 10K J 0805	
R632	D-0343103102	RES CH 1/10W 10K J 0805	
R638	D-0343103102	RES CH 1/10W 10K J 0805	
R615	D-0343103104	RES CH 1/10W 10K J 0805	
R617	D-0343103104	RES CH 1/10W 10K J 0805	

△	SYMBOL NO.	PART NO.	DESCRIPTION
<b>RESISTOR</b>			
R632	D-0343103104	RES CH 1/10W 10K J 0805	
R638	D-0343103104	RES CH 1/10W 10K J 0805	
R631	D-0343104101	RES CH 1/10W 100K J 0805	
R640	D-0343104101	RES CH 1/10W 100K J 0805	
R631	D-0343104102	RES CH 1/10W 100K J 0805	
R640	D-0343104102	RES CH 1/10W 100K J 0805	
R631	D-0343104104	RES CH 1/10W 100K J 0805	
R640	D-0343104104	RES CH 1/10W 100K J 0805	
R626	D-0343182101	RES CH 1/10W 1.8K J 0805	
R626	D-0343182102	RES CH 1/10W 1.8K J 0805	
R626	D-0343182104	RES CH 1/10W 1.8K J 0805	
R628	D-0343222101	RES CH 1/10W 2.2K J 0805	
R628	D-0343222102	RES CH 1/10W 2.2K J 0805	
R628	D-0343222104	RES CH 1/10W 2.2K J 0805	
R603	D-0343223101	RES CH 1/10W 22K J 0805	
R603	D-0343223102	RES CH 1/10W 22K J 0805	
R603	D-0343223104	RES CH 1/10W 22K J 0805	
R627	D-0343272101	RES CH 1/10W 2.7K J 0805	
R627	D-0343272102	RES CH 1/10W 2.7K J 0805	
R627	D-0343272104	RES CH 1/10W 2.7K J 0805	
R609	D-0343278101	RES CH 1/10W 2.7 J 0805	
R609	D-0343278102	RES CH 1/10W 2.7 J 0805	
R609	D-0343278104	RES CH 1/10W 2.7 J 0805	
R618	D-0343331101	RES CH 1/10W 330 J 0805	
R618	D-0343331102	RES CH 1/10W 330 J 0805	
R618	D-0343331104	RES CH 1/10W 330 J 0805	
R607	D-0343332101	RES CH 1/10W 3.3K J 0805	
R607	D-0343332102	RES CH 1/10W 3.3K J 0805	
R607	D-0343332104	RES CH 1/10W 3.3K J 0805	
R602	D-0343472101	RES CH 1/10W 4.7K J 0805	
R604	D-0343472101	RES CH 1/10W 4.7K J 0805	
R629	D-0343472101	RES CH 1/10W 4.7K J 0805	
R602	D-0343472102	RES CH 1/10W 4.7K J 0805	
R604	D-0343472102	RES CH 1/10W 4.7K J 0805	
R629	D-0343472102	RES CH 1/10W 4.7K J 0805	
R602	D-0343472104	RES CH 1/10W 4.7K J 0805	
R604	D-0343472104	RES CH 1/10W 4.7K J 0805	
R629	D-0343472104	RES CH 1/10W 4.7K J 0805	
R630	D-0343473101	RES CH 1/10W 47K J 0805	
R630	D-0343473102	RES CH 1/10W 47K J 0805	
R630	D-0343473104	RES CH 1/10W 47K J 0805	
R605	D-0343560101	RES CH 1/10W 56 J 0805	
R614	D-0343560101	RES CH 1/10W 56 J 0805	
R605	D-0343560102	RES CH 1/10W 56 J 0805	
R614	D-0343560102	RES CH 1/10W 56 J 0805	
R605	D-0343560104	RES CH 1/10W 56 J 0805	
R614	D-0343560104	RES CH 1/10W 56 J 0805	
R639	D-0343681101	RES CH 1/10W 680 J 0805	
R601	D-0343750101	RES CH 1/10W 75 J 0805	
R601	D-0343750102	RES CH 1/10W 75J 0805	
R601	D-0343750104	RES CH 1/10W 75 J 0805	
R613	D-0345044111	RES CH 1/10W 1.8K D 0805	
<b>CAPACITOR</b>			
C623	D-1511538102	CAP MC CP 50V 220P J COG 0805	
C623	D-1511538103	CAP MC CP 50V 220P J COG 0805	
C623	D-1511538109	CAP MC CP 50V 220P J COG 0805	
C627	D-1511542102	CAP MC CP 50V 470P J COG 0805	
C627	D-1511542103	CAP MC CP 50V 470P J COG 0805	
C627	D-1511542109	CAP MC CP 50V 470P J COG 0805	
C604	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C604	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C604	D-1512454109	CAP MC CP 50V .01U K X7R 0805	
C605	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
C607	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
C613	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
C615	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
C618	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
C619	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
C620	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
C622	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
C628	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
C629	D-1512458102	CAP MC CP 50V .1U K X7R 0805	
C605	D-1512458103	CAP MC CP 50V .1U K X7R 0805	



			VIDEO PROCESSOR P.W. BOARD ASSY (D-5600099001)		
△	SYMBOL NO.	PART NO.	DESCRIPTION	△	SYMBOL NO. PART NO. DESCRIPTION
			<b>CAPACITOR</b>		
	C607	D-1512458103	CAP MC CP 50V .1U K X7R 0805		C79 D-1403003407 CAP AL LD 10V 2.2KU M 12 5*20
	C613	D-1512458103	CAP MC CP 50V .1U K X7R 0805		C79 D-1403003408 CAP AL LD 10V 2.2KU M 12 5*20
	C615	D-1512458103	CAP MC CP 50V .1U K X7R 0805		C60 D-1432306705 CAP AL 16V 330U M 8*12 5 TP
	C618	D-1512458103	CAP MC CP 50V .1U K X7R 0805		C60 D-1432306707 CAP AL 16V 330U M 8*11.5 TP
	C619	D-1512458103	CAP MC CP 50V .1U K X7R 0805		C46 D-1695112910 CAP MM PC 63V 1U J TP5
	C620	D-1512458103	CAP MC CP 50V .1U K X7R 0805		
	C622	D-1512458103	CAP MC CP 50V .1U K X7R 0805		
	C628	D-1512458103	CAP MC CP 50V .1U K X7R 0805		
	C629	D-1512458103	CAP MC CP 50V .1U K X7R 0805		
	C605	D-1512458109	CAP MC CP 50V .1U K X7R 0805		
	C607	D-1512458109	CAP MC CP 50V .1U K X7R 0805		
	C613	D-1512458109	CAP MC CP 50V .1U K X7R 0805		
	C615	D-1512458109	CAP MC CP 50V .1U K X7R 0805		
	C618	D-1512458109	CAP MC CP 50V .1U K X7R 0805		
	C619	D-1512458109	CAP MC CP 50V .1U K X7R 0805		
	C620	D-1512458109	CAP MC CP 50V .1U K X7R 0805		
	C622	D-1512458109	CAP MC CP 50V .1U K X7R 0805		
	C628	D-1512458109	CAP MC CP 50V .1U K X7R 0805		
	C629	D-1512458109	CAP MC CP 50V .1U K X7R 0805		
	C625	D-1522454102	CAP MC CP 100V .01U K X7R 0805		
			<b>DIODE</b>		
	D601	D-2040010201	DIO SW 0.2A 75V MELF		
	D602	D-2040010201	DIO SW 0.2A 75V MELF		
	D603	D-2040010201	DIO SW 0.2A 75V MELF		
	D604	D-2040010201	DIO SW 0.2A 75V MELF		
	D601	D-2040010202	DIO SW 0.2A 75V MELF		
	D602	D-2040010202	DIO SW 0.2A 75V MELF		
	D603	D-2040010202	DIO SW 0.2A 75V MELF		
	D604	D-2040010202	DIO SW 0.2A 75V MELF		
	D601	D-2040010203	DIO SW .3A 75V MELF		
	D602	D-2040010203	DIO SW .3A 75V MELF		
	D603	D-2040010203	DIO SW .3A 75V MELF		
	D604	D-2040010203	DIO SW .3A 75V MELF		
	D601	D-2040010204	DIO SW 0.2A 75V LL-34		
	D602	D-2040010204	DIO SW 0.2A 75V LL-34		
	D603	D-2040010204	DIO SW 0.2A 75V LL-34		
	D604	D-2040010204	DIO SW 0.2A 75V LL-34		
			<b>TRANSISTOR</b>		
	Q601	D-2140017001	TR 40V 0.2A SOT23		
	Q606	D-2140017001	TR 40V 0.2A SOT23		
	Q601	D-2140017002	TR 40V 0.2A SOT23		
	Q606	D-2140017002	TR 40V 0.2A SOT23		
	Q607	D-2140018001	TR 40V 0.2A SOT23		
			<b>OTHER</b>		
	SG-2	D-0921220017	SPARK GAP 1200VDC +500V TP		
	SG-3	D-0921220017	SPARK GAP 1200VDC +500V TP		
	SG-4	D-0921220017	SPARK GAP 1200VDC +500V TP		
	SG-1	D-0921415018	SPARK GAP 140V N TP		
			<b>RESISTOR</b>		
	R619	D-0153222822	RES MOF 3W 2.2K J SMALL		
			<b>VR</b>		
	VR601	D-0606111002	RES VR VERT 3K T		
	VR601	D-0606111004	RES VR VERT 3K T		
	VR601	D-0606111013	RES VR VERT 3K T		
			<b>TRANSISTOR</b>		
	Q603	D-2120046001	TR 150V 0.3A T126		
			<b>IC</b>		
	IC601	D-2530024004	IC VIDEO AMP 16 PIN		
	IC603	D-2610034107	IC MULTIPLEX/DEMULTIPLEX SO-16		
	IC602	D-2610072007	IC CMOS D F-F SO-14PIN		
			<b>OTHER</b>		
△		D-3020005700	SOCKET FOR CRT		

△	SYMBOL NO.	PART NO.	DESCRIPTION	△	SYMBOL NO.	PART NO.	DESCRIPTION
RESISTOR				RESISTOR			
R274	D-0343102104	RES CH 1/10W 1K J 0805		R260	D-0343133101	RES CH 1/10W 13K J 0805	
R276	D-0343102104	RES CH 1/10W 1K J 0805		R263	D-0343133101	RES CH 1/10W 13K J 0805	
R28	D-0343102104	RES CH 1/10W 1K J 0805		R266	D-0343133101	RES CH 1/10W 13K J 0805	
R280	D-0343102104	RES CH 1/10W 1K J 0805		R260	D-0343133104	RES CH 1/10W 13K J 0805	
R281	D-0343102104	RES CH 1/10W 1K J 0805		R263	D-0343133104	RES CH 1/10W 13K J 0805	
R282	D-0343102104	RES CH 1/10W 1K J 0805		R266	D-0343133104	RES CH 1/10W 13K J 0805	
R284	D-0343102104	RES CH 1/10W 1K J 0805		R5	D-0343153101	RES CH 1/10W 15K J 0805	
R285	D-0343102104	RES CH 1/10W 1K J 0805		R63	D-0343153101	RES CH 1/10W 15K J 0805	
R38	D-0343102104	RES CH 1/10W 1K J 0805		R5	D-0343153102	RES CH 1/10W 15K J 0805	
R39	D-0343102104	RES CH 1/10W 1K J 0805		R63	D-0343153102	RES CH 1/10W 15K J 0805	
R49	D-0343102104	RES CH 1/10W 1K J 0805		R5	D-0343153104	RES CH 1/10W 15K J 0805	
R77	D-0343102104	RES CH 1/10W 1K J 0805		R63	D-0343153104	RES CH 1/10W 15K J 0805	
R102	D-0343103101	RES CH 1/10W 10K J 0805		R56	D-0343154101	RES CH 1/10W 150K J 0805	
R103	D-0343103101	RES CH 1/10W 10K J 0805		R56	D-0343154102	RES CH 1/10W 150K J 0805	
R120	D-0343103101	RES CH 1/10W 10K J 0805		R56	D-0343154104	RES CH 1/10W 150K J 0805	
R121	D-0343103101	RES CH 1/10W 10K J 0805		R73	D-0343183101	RES CH 1/10W 18K J 0805	
R202	D-0343103101	RES CH 1/10W 10K J 0805		R73	D-0343183102	RES CH 1/10W 18K J 0805	
R22	D-0343103101	RES CH 1/10W 10K J 0805		R73	D-0343183104	RES CH 1/10W 18K J 0805	
R244	D-0343103101	RES CH 1/10W 10K J 0805		R113	D-0343200101	RES CH 1/10W 20 J 0805	
R245	D-0343103101	RES CH 1/10W 10K J 0805		R113	D-0343200102	RES CH 1/10W 20 J 0805	
R270	D-0343103101	RES CH 1/10W 10K J 0805		R113	D-0343200104	RES CH 1/10W 20 J 0805	
R277	D-0343103101	RES CH 1/10W 10K J 0805		R268	D-0343202101	RES CH 1/10W 2K J 0805	
R279	D-0343103101	RES CH 1/10W 10K J 0805		R61	D-0343202101	RES CH 1/10W 2K J 0805	
R31	D-0343103101	RES CH 1/10W 10K J 0805		R268	D-0343202102	RES CH 1/10W 2K J 0805	
R40	D-0343103101	RES CH 1/10W 10K J 0805		R61	D-0343202102	RES CH 1/10W 2K J 0805	
R69	D-0343103101	RES CH 1/10W 10K J 0805		R268	D-0343202104	RES CH 1/10W 2K J 0805	
R88	D-0343103101	RES CH 1/10W 10K J 0805		R61	D-0343202104	RES CH 1/10W 2K J 0805	
R102	D-0343103102	RES CH 1/10W 10K J 0805		R54	D-0343203101	RES CH 1/10W 20K J 0805	
R103	D-0343103102	RES CH 1/10W 10K J 0805		R54	D-0343203102	RES CH 1/10W 20K J 0805	
R120	D-0343103102	RES CH 1/10W 10K J 0805		R54	D-0343203104	RES CH 1/10W 20K J 0805	
R121	D-0343103102	RES CH 1/10W 10K J 0805		R105	D-0343220101	RES CH 1/10W 22 J 0805	
R202	D-0343103102	RES CH 1/10W 10K J 0805		R105	D-0343220102	RES CH 1/10W 22 J 0805	
R22	D-0343103102	RES CH 1/10W 10K J 0805		R105	D-0343220104	RES CH 1/10W 22 J 0805	
R244	D-0343103102	RES CH 1/10W 10K J 0805		R41	D-0343221101	RES CH 1/10W 220 J 0805	
R245	D-0343103102	RES CH 1/10W 10K J 0805		R53	D-0343221101	RES CH 1/10W 220 J 0805	
R270	D-0343103102	RES CH 1/10W 10K J 0805		R68	D-0343221101	RES CH 1/10W 220 J 0805	
R277	D-0343103102	RES CH 1/10W 10K J 0805		R41	D-0343221102	RES CH 1/10W 220 J 0805	
R279	D-0343103102	RES CH 1/10W 10K J 0805		R53	D-0343221102	RES CH 1/10W 220 J 0805	
R31	D-0343103102	RES CH 1/10W 10K J 0805		R68	D-0343221102	RES CH 1/10W 220 J 0805	
R40	D-0343103102	RES CH 1/10W 10K J 0805		R41	D-0343221104	RES CH 1/10W 220 J 0805	
R69	D-0343103102	RES CH 1/10W 10K J 0805		R53	D-0343221104	RES CH 1/10W 220 J 0805	
R88	D-0343103102	RES CH 1/10W 10K J 0805		R68	D-0343221104	RES CH 1/10W 220 J 0805	
R102	D-0343103104	RES CH 1/10W 10K J 0805		R2	D-0343222101	RES CH 1/10W 2.2K J 0805	
R103	D-0343103104	RES CH 1/10W 10K J 0805		R214	D-0343222101	RES CH 1/10W 2.2K J 0805	
R120	D-0343103104	RES CH 1/10W 10K J 0805		R215	D-0343222101	RES CH 1/10W 2.2K J 0805	
R121	D-0343103104	RES CH 1/10W 10K J 0805		R218	D-0343222101	RES CH 1/10W 2.2K J 0805	
R202	D-0343103104	RES CH 1/10W 10K J 0805		R221	D-0343222101	RES CH 1/10W 2.2K J 0805	
R22	D-0343103104	RES CH 1/10W 10K J 0805		R224	D-0343222101	RES CH 1/10W 2.2K J 0805	
R244	D-0343103104	RES CH 1/10W 10K J 0805		R227	D-0343222101	RES CH 1/10W 2.2K J 0805	
R245	D-0343103104	RES CH 1/10W 10K J 0805		R239	D-0343222101	RES CH 1/10W 2.2K J 0805	
R270	D-0343103104	RES CH 1/10W 10K J 0805		R240	D-0343222101	RES CH 1/10W 2.2K J 0805	
R277	D-0343103104	RES CH 1/10W 10K J 0805		R261	D-0343222101	RES CH 1/10W 2.2K J 0805	
R279	D-0343103104	RES CH 1/10W 10K J 0805		R264	D-0343222101	RES CH 1/10W 2.2K J 0805	
R31	D-0343103104	RES CH 1/10W 10K J 0805		R267	D-0343222101	RES CH 1/10W 2.2K J 0805	
R40	D-0343103104	RES CH 1/10W 10K J 0805		R2	D-0343222102	RES CH 1/10W 2.2K J 0805	
R69	D-0343103104	RES CH 1/10W 10K J 0805		R214	D-0343222102	RES CH 1/10W 2.2K J 0805	
R88	D-0343103104	RES CH 1/10W 10K J 0805		R215	D-0343222102	RES CH 1/10W 2.2K J 0805	
R251	D-0343104101	RES CH 1/10W 100K J 0805		R218	D-0343222102	RES CH 1/10W 2.2K J 0805	
R75	D-0343104101	RES CH 1/10W 100K J 0805		R221	D-0343222102	RES CH 1/10W 2.2K J 0805	
R79	D-0343104101	RES CH 1/10W 100K J 0805		R224	D-0343222102	RES CH 1/10W 2.2K J 0805	
R251	D-0343104102	RES CH 1/10W 100K J 0805		R227	D-0343222102	RES CH 1/10W 2.2K J 0805	
R75	D-0343104102	RES CH 1/10W 100K J 0805		R239	D-0343222102	RES CH 1/10W 2.2K J 0805	
R79	D-0343104102	RES CH 1/10W 100K J 0805		R240	D-0343222102	RES CH 1/10W 2.2K J 0805	
R251	D-0343104104	RES CH 1/10W 100K J 0805		R261	D-0343222102	RES CH 1/10W 2.2K J 0805	
R75	D-0343104104	RES CH 1/10W 100K J 0805		R264	D-0343222102	RES CH 1/10W 2.2K J 0805	
R79	D-0343104104	RES CH 1/10W 100K J 0805		R267	D-0343222102	RES CH 1/10W 2.2K J 0805	
R24	D-0343122101	RES CH 1/10W 1.2K J 0805		R2	D-0343222104	RES CH 1/10W 2.2K J 0805	
R24	D-0343122102	RES CH 1/10W 1.2K J 0805		R214	D-0343222104	RES CH 1/10W 2.2K J 0805	
R24	D-0343122104	RES CH 1/10W 1.2K J 0805		R215	D-0343222104	RES CH 1/10W 2.2K J 0805	
R59	D-0343123101	RES CH 1/10W 12K J 0805		R218	D-0343222104	RES CH 1/10W 2.2K J 0805	
R60	D-0343123101	RES CH 1/10W 12K J 0805		R221	D-0343222104	RES CH 1/10W 2.2K J 0805	
R59	D-0343123102	RES CH 1/10W 12K J 0805		R224	D-0343222104	RES CH 1/10W 2.2K J 0805	
R60	D-0343123102	RES CH 1/10W 12K J 0805		R227	D-0343222104	RES CH 1/10W 2.2K J 0805	
R59	D-0343123104	RES CH 1/10W 12K J 0805		R239	D-0343222104	RES CH 1/10W 2.2K J 0805	
R60	D-0343123104	RES CH 1/10W 12K J 0805		R240	D-0343222104	RES CH 1/10W 2.2K J 0805	

△	SYMBOL NO.	PART NO.	DESCRIPTION	△	SYMBOL NO.	PART NO.	DESCRIPTION
	<b>RESISTOR</b>				<b>RESISTOR</b>		
R261	D-0343222104	RES CH 1/10W 2.2K J 0805		R48	D-0343432101	RES CH 1/10W 4.3K J 0805	
R264	D-0343222104	RES CH 1/10W 2.2K J 0805		R48	D-0343432102	RES CH 1/10W 4.3K J 0805	
R267	D-0343222104	RES CH 1/10W 2.2K J 0805		R48	D-0343432104	RES CH 1/10W 4.3K J 0805	
R104	D-0343223101	RES CH 1/10W 22K J 0805		R117	D-0343472101	RES CH 1/10W 4.7K J 0805	
R122	D-0343223101	RES CH 1/10W 22K J 0805		R16	D-0343472101	RES CH 1/10W 4.7K J 0805	
R123	D-0343223101	RES CH 1/10W 22K J 0805		R18	D-0343472101	RES CH 1/10W 4.7K J 0805	
R124	D-0343223101	RES CH 1/10W 22K J 0805		R206	D-0343472101	RES CH 1/10W 4.7K J 0805	
R204	D-0343223101	RES CH 1/10W 22K J 0805		R287	D-0343472101	RES CH 1/10W 4.7K J 0805	
R42	D-0343223101	RES CH 1/10W 22K J 0805		R288	D-0343472101	RES CH 1/10W 4.7K J 0805	
R104	D-0343223102	RES CH 1/10W 22K J 0805		R289	D-0343472101	RES CH 1/10W 4.7K J 0805	
R122	D-0343223102	RES CH 1/10W 22K J 0805		R34	D-0343472101	RES CH 1/10W 4.7K J 0805	
R123	D-0343223102	RES CH 1/10W 22K J 0805		R36	D-0343472101	RES CH 1/10W 4.7K J 0805	
R124	D-0343223102	RES CH 1/10W 22K J 0805		R43	D-0343472101	RES CH 1/10W 4.7K J 0805	
R204	D-0343223102	RES CH 1/10W 22K J 0805		R117	D-0343472102	RES CH 1/10W 4.7K J 0805	
R42	D-0343223102	RES CH 1/10W 22K J 0805		R16	D-0343472102	RES CH 1/10W 4.7K J 0805	
R104	D-0343223104	RES CH 1/10W 22K J 0805		R18	D-0343472102	RES CH 1/10W 4.7K J 0805	
R122	D-0343223104	RES CH 1/10W 22K J 0805		R206	D-0343472102	RES CH 1/10W 4.7K J 0805	
R123	D-0343223104	RES CH 1/10W 22K J 0805		R287	D-0343472102	RES CH 1/10W 4.7K J 0805	
R124	D-0343223104	RES CH 1/10W 22K J 0805		R288	D-0343472102	RES CH 1/10W 4.7K J 0805	
R204	D-0343223104	RES CH 1/10W 22K J 0805		R289	D-0343472102	RES CH 1/10W 4.7K J 0805	
R42	D-0343223104	RES CH 1/10W 22K J 0805		R34	D-0343472102	RES CH 1/10W 4.7K J 0805	
R19	D-0343243101	RES CH 1/10W 24K J 0805		R36	D-0343472102	RES CH 1/10W 4.7K J 0805	
R19	D-0343243102	RES CH 1/10W 24K J 0805		R43	D-0343472102	RES CH 1/10W 4.7K J 0805	
R19	D-0343243104	RES CH 1/10W 24K J 0805		R117	D-0343472104	RES CH 1/10W 4.7K J 0805	
R23	D-0343244101	RES CH 1/10W 240K J 0805		R16	D-0343472104	RES CH 1/10W 4.7K J 0805	
R250	D-0343244101	RES CH 1/10W 240K J 0805		R18	D-0343472104	RES CH 1/10W 4.7K J 0805	
R23	D-0343244102	RES CH 1/10W 240K J 0805		R206	D-0343472104	RES CH 1/10W 4.7K J 0805	
R250	D-0343244102	RES CH 1/10W 240K J 0805		R287	D-0343472104	RES CH 1/10W 4.7K J 0805	
R23	D-0343244104	RES CH 1/10W 240K J 0805		R288	D-0343472104	RES CH 1/10W 4.7K J 0805	
R250	D-0343244104	RES CH 1/10W 240K J 0805		R289	D-0343472104	RES CH 1/10W 4.7K J 0805	
R1	D-0343271101	RES CH 1/10W 270 J 0805		R34	D-0343472104	RES CH 1/10W 4.7K J 0805	
R1	D-0343271102	RES CH 1/10W 270 J 0805		R36	D-0343472104	RES CH 1/10W 4.7K J 0805	
R1	D-0343271104	RES CH 1/10W 270 J 0805		R43	D-0343472104	RES CH 1/10W 4.7K J 0805	
R30	D-0343272101	RES CH 1/10W 2.7K J 0805		R101	D-0343473101	RES CH 1/10W 47K J 0805	
R30	D-0343272102	RES CH 1/10W 2.7K J 0805		R29	D-0343473101	RES CH 1/10W 47K J 0805	
R30	D-0343272104	RES CH 1/10W 2.7K J 0805		R74	D-0343473101	RES CH 1/10W 47K J 0805	
R37	D-0343273101	RES CH 1/10W 27K J 0805		R90	D-0343473101	RES CH 1/10W 47K J 0805	
R71	D-0343273101	RES CH 1/10W 27K J 0805		R96	D-0343473101	RES CH 1/10W 47K J 0805	
R37	D-0343273102	RES CH 1/10W 27K J 0805		R101	D-0343473102	RES CH 1/10W 47K J 0805	
R71	D-0343273102	RES CH 1/10W 27K J 0805		R29	D-0343473102	RES CH 1/10W 47K J 0805	
R37	D-0343273104	RES CH 1/10W 27K J 0805		R74	D-0343473102	RES CH 1/10W 47K J 0805	
R71	D-0343273104	RES CH 1/10W 27K J 0805		R90	D-0343473102	RES CH 1/10W 47K J 0805	
R66	D-0343303101	RES CH 1/10W 30K J 0805		R96	D-0343473102	RES CH 1/10W 47K J 0805	
R72	D-0343303101	RES CH 1/10W 30K J 0805		R101	D-0343473104	RES CH 1/10W 47K J 0805	
R66	D-0343303102	RES CH 1/10W 30K J 0805		R29	D-0343473104	RES CH 1/10W 47K J 0805	
R72	D-0343303102	RES CH 1/10W 30K J 0805		R74	D-0343473104	RES CH 1/10W 47K J 0805	
R66	D-0343303104	RES CH 1/10W 30K J 0805		R90	D-0343473104	RES CH 1/10W 47K J 0805	
R72	D-0343303104	RES CH 1/10W 30K J 0805		R96	D-0343473104	RES CH 1/10W 47K J 0805	
R21	D-0343331101	RES CH 1/10W 330 J 0805		R8	D-0343511101	RES CH 1/10W 510 J 0805	
R67	D-0343331101	RES CH 1/10W 330 J 0805		R8	D-0343511102	RES CH 1/10W 510 J 0805	
R78	D-0343331101	RES CH 1/10W 330 J 0805		R8	D-0343511104	RES CH 1/10W 510 J 0805	
R21	D-0343331102	RES CH 1/10W 330 J 0805		R51	D-0343512101	RES CH 1/10W 5.1K J 0805	
R67	D-0343331102	RES CH 1/10W 330 J 0805		R52	D-0343512101	RES CH 1/10W 5.1K J 0805	
R78	D-0343331102	RES CH 1/10W 330 J 0805		R51	D-0343512102	RES CH 1/10W 5.1K J 0805	
R21	D-0343331104	RES CH 1/10W 330 J 0805		R52	D-0343512102	RES CH 1/10W 5.1K J 0805	
R67	D-0343331104	RES CH 1/10W 330 J 0805		R51	D-0343512104	RES CH 1/10W 5.1K J 0805	
R78	D-0343331104	RES CH 1/10W 330 J 0805		R52	D-0343512104	RES CH 1/10W 5.1K J 0805	
R7	D-0343332101	RES CH 1/10W 3.3K J 0805		R14	D-0343561101	RES CH 1/10W 560 J 0805	
R7	D-0343332102	RES CH 1/10W 3.3K J 0805		R14	D-0343561102	RES CH 1/10W 560 J 0805	
R7	D-0343332104	RES CH 1/10W 3.3K J 0805		R14	D-0343561104	RES CH 1/10W 560 J 0805	
R275	D-0343333101	RES CH 1/10W 33K J 0805		R20	D-0343563102	RES CH 1/10W 56K J 0805	
R283	D-0343333101	RES CH 1/10W 33K J 0805		R20	D-0343563104	RES CH 1/10W 56K J 0805	
R55	D-0343333101	RES CH 1/10W 33K J 0805		R62	D-0343565101	RES CH 1/10W 5.6M J 0805	
R275	D-0343333102	RES CH 1/10W 33K J 0805		R62	D-0343565104	RES CH 1/10W 5.6M J 0805	
R283	D-0343333102	RES CH 1/10W 33K J 0805		R26	D-0343684101	RES CH 1/10W 680K J 0805	
R55	D-0343333102	RES CH 1/10W 33K J 0805		R26	D-0343684102	RES CH 1/10W 680K J 0805	
R275	D-0343333104	RES CH 1/10W 33K J 0805		R26	D-0343684104	RES CH 1/10W 680K J 0805	
R283	D-0343333104	RES CH 1/10W 33K J 0805		R12	D-0343750101	RES CH 1/10W 75 J 0805	
R55	D-0343333104	RES CH 1/10W 33K J 0805		R13	D-0343750101	RES CH 1/10W 75 J 0805	
R115	D-0343391101	RES CH 1/10W 390 J 0805		R15	D-0343750101	RES CH 1/10W 75 J 0805	
R116	D-0343391101	RES CH 1/10W 390 J 0805		R3	D-0343750101	RES CH 1/10W 75 J 0805	
R115	D-0343391102	RES CH 1/10W 390 J 0805		R4	D-0343750101	RES CH 1/10W 75 J 0805	
R116	D-0343391102	RES CH 1/10W 390 J 0805		R9	D-0343750101	RES CH 1/10W 75 J 0805	
R115	D-0343391104	RES CH 1/10W 390 J 0805		R12	D-0343750102	RES CH 1/10W 75J 0805	
R116	D-0343391104	RES CH 1/10W 390 J 0805		R13	D-0343750102	RES CH 1/10W 75J 0805	

△	SYMBOL NO.	PART NO.	DESCRIPTION	△	SYMBOL NO.	PART NO.	DESCRIPTION
<b>RESISTOR</b>				<b>CAPACITOR</b>			
R15	D-0343750102	RES CH 1/10W 75J 0805		C53	D-1511544103	CAP MC CP 50V 680P J COG 0805	
R3	D-0343750102	RES CH 1/10W 75J 0805		C59	D-1511544103	CAP MC CP 50V 680P J COG 0805	
R4	D-0343750102	RES CH 1/10W 75J 0805		C53	D-1511544109	CAP MC CP 50V 680P J COG 0805	
R9	D-0343750102	RES CH 1/10W 75J 0805		C59	D-1511544109	CAP MC CP 50V 680P J COG 0805	
R12	D-0343750104	RES CH 1/10W 75 J 0805		C220	D-1512445102	CAP MC CP 50V 1KP K X7R 0805	
R13	D-0343750104	RES CH 1/10W 75 J 0805		C221	D-1512445102	CAP MC CP 50V 1KP K X7R 0805	
R15	D-0343750104	RES CH 1/10W 75 J 0805		C222	D-1512445102	CAP MC CP 50V 1KP K X7R 0805	
R3	D-0343750104	RES CH 1/10W 75 J 0805		C37	D-1512445102	CAP MC CP 50V 1KP K X7R 0805	
R4	D-0343750104	RES CH 1/10W 75 J 0805		C48	D-1512445102	CAP MC CP 50V 1KP K X7R 0805	
R9	D-0343750104	RES CH 1/10W 75 J 0805		C89	D-1512445102	CAP MC CP 50V 1KP K X7R 0805	
R17	D-0343752101	RES CH 1/10W 7.5K J 0805		C220	D-1512445103	CAP MC CP 50V 1KP K X7R 0805	
R17	D-0343752102	RES CH 1/10W 7.5K J 0805		C221	D-1512445103	CAP MC CP 50V 1KP K X7R 0805	
R17	D-0343752104	RES CH 1/10W 7.5K J 0805		C222	D-1512445103	CAP MC CP 50V 1KP K X7R 0805	
R27	D-0343753101	RES CH 1/10W 75K J 0805		C37	D-1512445103	CAP MC CP 50V 1KP K X7R 0805	
R27	D-0343753102	RES CH 1/10W 75K J 0805		C48	D-1512445103	CAP MC CP 50V 1KP K X7R 0805	
R27	D-0343753104	RES CH 1/10W 75K J 0805		C89	D-1512445103	CAP MC CP 50V 1KP K X7R 0805	
R112	D-0343820101	RES CH 1/10W 82 J 0805		C220	D-1512445109	CAP MC CP 50V 1KP K X7R 0805	
R6	D-0343820101	RES CH 1/10W 82 J 0805		C221	D-1512445109	CAP MC CP 50V 1KP K X7R 0805	
R112	D-0343820102	RES CH 1/10W 82 J 0805		C222	D-1512445109	CAP MC CP 50V 1KP K X7R 0805	
R6	D-0343820102	RES CH 1/10W 82 J 0805		C37	D-1512445109	CAP MC CP 50V 1KP K X7R 0805	
R112	D-0343820104	RES CH 1/10W 82 J 0805		C48	D-1512445109	CAP MC CP 50V 1KP K X7R 0805	
R6	D-0343820104	RES CH 1/10W 82 J 0805		C89	D-1512445109	CAP MC CP 50V 1KP K X7R 0805	
R80	D-0343824101	RES CH 1/10W 820K J 0805		C73	D-1512446102	CAP MC CP 50V 2.2KP K X7R 0805	
R80	D-0343824104	RES CH 1/10W 820K J 0805		C73	D-1512446103	CAP MC CP 50V 2.2KP K X7R 0805	
R10	D-0343911101	RES CH 1/10W 910 J 0805		C73	D-1512446109	CAP MC CP 50V 2.2KP K X7R 0805	
R10	D-0343911102	RES CH 1/10W 910 J 0805		C57	D-1512449102	CAP MC CP 50V 4.7KP K X7R 0805	
R10	D-0343911104	RES CH 1/10W 910 J 0805		C61	D-1512449102	CAP MC CP 50V 4.7KP K X7R 0805	
R50	D-0343912101	RES CH 1/10W 9.1K J 0805		C93	D-1512449102	CAP MC CP 50V 4.7KP K X7R 0805	
R50	D-0343912102	RES CH 1/10W 9.1K J 0805		C57	D-1512449103	CAP MC CP 50V 4.7KP K X7R 0805	
R50	D-0343912104	RES CH 1/10W 9.1K J 0805		C61	D-1512449103	CAP MC CP 50V 4.7KP K X7R 0805	
R25A	D-0345085111	RES CH 1/10W 91K D 0805		C93	D-1512449103	CAP MC CP 50V 4.7KP K X7R 0805	
R25	D-0345104111	RES CH 1/10W 470K D 0805		C57	D-1512449109	CAP MC CP 50V 4.7KP K X7R 0805	
RP1	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C61	D-1512449109	CAP MC CP 50V 4.7KP K X7R 0805	
RP10	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C93	D-1512449109	CAP MC CP 50V 4.7KP K X7R 0805	
RP11	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C100	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
RP12	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C15	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
RP2	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C17	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
RP3	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C18	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
RP4	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C21	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
RP5	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C22	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
RP6	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C23	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
RP7	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C24	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
RP8	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C25	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
RP9	D-0619900912	RES ARRAY 220 J SMD4*2 3.2*1.6		C26	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
<b>CAPACITOR</b>				C27	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C45	D-1483803318	CAP AL CP 10V 220U M 10.1*4.6*		C30	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C56	D-1483803318	CAP AL CP 10V 220U M 10.1*4.6*		C31	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C258	D-1493209018	CAP AL CP 25V 10U M 6.3*3.6*3.		C32	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C70	D-1493215018	CAP AL CP 50V 1U M 6.3*3.6*3.		C33	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C224	D-1493215518	CAP AL CP 50V 2.2U M 6.3*3.6*3.		C34	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C55	D-1493215518	CAP AL CP 50V 2.2U M 6.3*3.6*3.		C35	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C62	D-1493215518	CAP AL CP 50V 2.2U M 6.3*3.6*3.		C39	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C20	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.		C40	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C94	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.		C41	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C63	D-1493807318	CAP AL CP 16V 100U M 10.1*4.6*		C67	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C7	D-1493807318	CAP AL CP 16V 100U M 10.1*4.6*		C68	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C47	D-1511512102	CAP MC CP 50V 18P J COG 0805		C69	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C58	D-1511512102	CAP MC CP 50V 18P J COG 0805		C81	D-1512454102	CAP MC CP 50V .01U K X7R 0805	
C227	D-1511514102	CAP MC CP 50V 22P J COG 0805		C100	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C228	D-1511514102	CAP MC CP 50V 22P J COG 0805		C15	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C227	D-1511514103	CAP MC CP 50V 22P J COG 0805		C17	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C228	D-1511514103	CAP MC CP 50V 22P J COG 0805		C18	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C227	D-1511514109	CAP MC CP 50V 22P J COG 0805		C21	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C228	D-1511514109	CAP MC CP 50V 22P J COG 0805		C22	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C223	D-1511530102	CAP MC CP 50V 100P J COG 0805		C23	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C230	D-1511530102	CAP MC CP 50V 100P J COG 0805		C24	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C223	D-1511530103	CAP MC CP 50V 100P J COG 0805		C25	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C230	D-1511530103	CAP MC CP 50V 100P J COG 0805		C26	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C223	D-1511530109	CAP MC CP 50V 100P J COG 0805		C27	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C230	D-1511530109	CAP MC CP 50V 100P J COG 0805		C30	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C88	D-1511540102	CAP MC CP 50V 330P J COG 0805		C31	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C88	D-1511540103	CAP MC CP 50V 330P J COG 0805		C32	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C88	D-1511540109	CAP MC CP 50V 330P J COG 0805		C33	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C53	D-1511544102	CAP MC CP 50V 680P J COG 0805		C34	D-1512454103	CAP MC CP 50V .01U K X7R 0805	
C59	D-1511544102	CAP MC CP 50V 680P J COG 0805		C35	D-1512454103	CAP MC CP 50V .01U K X7R 0805	

[illegible]

△ SYMBOL NO.	PART NO.	DESCRIPTION	△ SYMBOL NO.	PART NO.	DESCRIPTION
<b>CAPACITOR</b>			<b>IC</b>		
C90	D-1512458109	CAP MC CP 50V .1U K X7R 0805	IC18	D-2610040111	IC D F-F SO-14
C92	D-1512458109	CAP MC CP 50V .1U K X7R 0805	IC8	D-2610040111	IC D F-F SO-14
C98	D-1512458109	CAP MC CP 50V .1U K X7R 0805	IC7	D-2610060207	IC PLL SO-16
C99	D-1512458109	CAP MC CP 50V .1U K X7R 0805	IC15	D-2610107011	IC MONOSTABLE MULT SOIC-16
C442	D-1512466102	CAP MC CP 50V .033U K X7R 0805	IC5	D-2610398020	IC 512K*16 SOJ-40P 40nS
C442	D-1512466103	CAP MC CP 50V .033U K X7R 0805	IC6	D-2610398020	IC 512K*16 SOJ-40P 40nS
C442	D-1512466109	CAP MC CP 50V .033U K X7R 0805	<b>COIL</b>		
C19	D-1512482102	CAP MC CP 50V .068U K X7R 0805	L1	D-2921111322	CORE BEAD 1206 SMD
C252	D-1512482102	CAP MC CP 50V .068U K X7R 0805	L10	D-2921111322	CORE BEAD 1206 SMD
C19	D-1512482103	CAP MC CP 50V .068U K X7R 0805	L12	D-2921111322	CORE BEAD 1206 SMD
C252	D-1512482103	CAP MC CP 50V .068U K X7R 0805	L16	D-2921111322	CORE BEAD 1206 SMD
C19	D-1512482109	CAP MC CP 50V .068U K X7R 0805	L17	D-2921111322	CORE BEAD 1206 SMD
C252	D-1512482109	CAP MC CP 50V .068U K X7R 0805	L18	D-2921111322	CORE BEAD 1206 SMD
C5	D-1543664102	CAP MC CP 16V .47U M Y5V 0805	L19	D-2921111322	CORE BEAD 1206 SMD
C5	D-1543664109	CAP MC CP 16V .47U M Y5V 0805	L2	D-2921111322	CORE BEAD 1206 SMD
C65	D-1557647102	CAP MC CP 25V .33U Z Y5V 0805	L20	D-2921111322	CORE BEAD 1206 SMD
<b>DIODE</b>			L21	D-2921111322	CORE BEAD 1206 SMD
D11	D-2040010201	DIO SW 0.2A 75V MELF	L22	D-2921111322	CORE BEAD 1206 SMD
D2	D-2040010201	DIO SW 0.2A 75V MELF	L23	D-2921111322	CORE BEAD 1206 SMD
D3	D-2040010201	DIO SW 0.2A 75V MELF	L4	D-2921111322	CORE BEAD 1206 SMD
D4	D-2040010201	DIO SW 0.2A 75V MELF	L5	D-2921111322	CORE BEAD 1206 SMD
D5	D-2040010201	DIO SW 0.2A 75V MELF	L6	D-2921111322	CORE BEAD 1206 SMD
D7	D-2040010201	DIO SW 0.2A 75V MELF	L8	D-2921111322	CORE BEAD 1206 SMD
D8	D-2040010201	DIO SW 0.2A 75V MELF	<b>RESISTOR</b>		
D9	D-2040010201	DIO SW 0.2A 75V MELF	R99	D-0133479810	RES MOF 1W .47 J SMALL
D11	D-2040010202	DIO SW 0.2A 75V MELF	R99	D-0133479822	RES MOF 1W .47 J SMALL
D2	D-2040010202	DIO SW 0.2A 75V MELF	R417	D-0143220803	RES MOF 2W 22 J SMALL
D3	D-2040010202	DIO SW 0.2A 75V MELF	<b>CAPACITOR</b>		
D4	D-2040010202	DIO SW 0.2A 75V MELF	C28	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.
D5	D-2040010202	DIO SW 0.2A 75V MELF	C29	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.
D7	D-2040010202	DIO SW 0.2A 75V MELF	C4	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.
D8	D-2040010202	DIO SW 0.2A 75V MELF	C6	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.
D9	D-2040010202	DIO SW 0.2A 75V MELF	C8	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.
D11	D-2040010203	DIO SW .3A 75V MELF	C91	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.
D2	D-2040010203	DIO SW .3A 75V MELF	C97	D-1493507118	CAP AL CP 16V 47U M 7.1*4.6*4.
D3	D-2040010203	DIO SW .3A 75V MELF	<b>IC</b>		
D4	D-2040010203	DIO SW .3A 75V MELF	IC16	D-2510092147	IC BASEBAND DELAY LINE DIP-16
D5	D-2040010203	DIO SW .3A 75V MELF	IC13	D-2530059016	IC 1W BTL MONO AUDIO AMP 8DIP
D7	D-2040010203	DIO SW .3A 75V MELF	IC14	D-2540156016	IC PAL & PAL/NTSC TV 52DIP
D8	D-2040010203	DIO SW .3A 75V MELF	IC11	D-2610049412	IC SERIAL 256*8 EEPROM 8PIN
D9	D-2040010203	DIO SW .3A 75V MELF	IC9	D-2610404134	IC CMOS 8-BIT SDIP42-P-600-1.7
D11	D-2040010204	DIO SW 0.2A 75V LL-34	<b>OTHER</b>		
D2	D-2040010204	DIO SW 0.2A 75V LL-34	X3	D-0730240212	CRYSTAL 8MHZ 30PPM 30PF
D3	D-2040010204	DIO SW 0.2A 75V LL-34	X2	D-0730270412	CRYSTALS 4.433619MHZ 30PPM
D4	D-2040010204	DIO SW 0.2A 75V LL-34	X1	D-0730320112	CRYSTAL 3.57 9545MHZ 50PPM
D5	D-2040010204	DIO SW 0.2A 75V LL-34	X4	D-2909901211	FILTER 6.75MHZ 25DB~60DB
D7	D-2040010204	DIO SW 0.2A 75V LL-34		D-3020002200	IC SOCKET 8PIN .3CC
D8	D-2040010204	DIO SW 0.2A 75V LL-34			
D9	D-2040010204	DIO SW 0.2A 75V LL-34			
<b>TRANSISTOR</b>					
Q1	D-2140017001	TR 40V 0.2A SOT23			
Q10	D-2140017001	TR 40V 0.2A SOT23			
Q11	D-2140017001	TR 40V 0.2A SOT23			
Q12	D-2140017001	TR 40V 0.2A SOT23			
Q13	D-2140017001	TR 40V 0.2A SOT23			
Q14	D-2140017001	TR 40V 0.2A SOT23			
Q15	D-2140017001	TR 40V 0.2A SOT23			
Q4	D-2140017001	TR 40V 0.2A SOT23			
Q7	D-2140017001	TR 40V 0.2A SOT23			
Q9	D-2140017001	TR 40V 0.2A SOT23			
Q5	D-2140043506	TR 50V .1A SC-59			
Q6	D-2140043506	TR 50V .1A SC-59			
Q8	D-2140043506	TR 50V .1A SC-59			
<b>IC</b>					
IC1	D-2500005301	IC REGU 5V 0.1A SO-8 PIN			
IC1	D-2500005303	IC REGU 5V 0.1A SO-8 PIN			
IC1	D-2500005305	IC REGU 5V 0.1A SO-8 PIN			
IC2	D-2510055014	IC PLL SO-14PIN			
IC3	D-2530057016	IC RGB 6BIT AD CONVERTER			
IC4	D-2530058065	IC COLOR SEQUENTIAL 113PIN SMD			
IC20	D-2600019309	IC EXCLUSIVE OR SO-14PIN			
IC20	D-2600019311	IC EXCLUSIVE OR SO-14PIN			
IC19	D-2600031511	IC MONOSTABLE SO-16			
IC10	D-2600056234	IC CMOS MULTIPLEXER SOL16 P-15			
IC12	D-2610040111	IC D F-F SO-14			



## MAIN P.W. BOARD ASSY (D-5600098001)

△	SYMBOL NO.	PART NO.	DESCRIPTION	△	SYMBOL NO.	PART NO.	DESCRIPTION
	<b>RESISTOR</b>				<b>RESISTOR</b>		
	R415	D-0123339822	RES MOF 1/2W .33 J SMALL		R515	D-0313228001	RES CH 1/4W 2.2 J 1206
	<b>CAPACITOR</b>				R516	D-0313228001	RES CH 1/4W 2.2 J 1206
	C422	D-1403022028	CAP AL LD 100V 22U M 8*11.5		R510	D-0313228004	RES CH 1/4W 2.2 J 1206
	C413	D-1410715005	CAP AL 50V 1U M 4*7		R515	D-0313228004	RES CH 1/4W 2.2 J 1206
	C413	D-1410715007	CAP AL 50V 1U M 4*7 TP2.5		R516	D-0313228004	RES CH 1/4W 2.2 J 1206
	C413	D-1410715009	CAP AL 50V 1U M 4*7 TP2.5		R440	D-0323122601	RES CH 1/2W 1.2K J 2010
	C401	D-1432309105	CAP AL 25V 100U M 6.3*11 TP		R440	D-0323122602	RES CH 1/2W 1.2K J 2010
	C401	D-1432309107	CAP AL 25V 100U M 6.3*11 TP		R440	D-0323122604	RES CH 1/2W 1.2K J 2010
	C426	D-1432309305	CAP AL 25V 220U M 8*12.5 TP		R442	D-0323128601	RES CH 1/2W 1.2 J 2010
	C438	D-1432309305	CAP AL 25V 220U M 8*12.5 TP		R413	D-0323242601	RES CH 1/2W 2.4K J 2010
	C439	D-1432309305	CAP AL 25V 220U M 8*12.5 TP		R413	D-0323242602	RES CH 1/2W 2.4K J 2010
	C426	D-1432309307	CAP AL 25V 220U M 8*11.5 TP		R413	D-0323242604	RES CH 1/2W 2.4K J 2010
	C438	D-1432309307	CAP AL 25V 220U M 8*11.5 TP		R512	D-0323271601	RES CH 1/2W 270 J 2010
	C439	D-1432309307	CAP AL 25V 220U M 8*11.5 TP		R512	D-0323271602	RES CH 1/2W 270 J 2010
	C904	D-1432309505	CAP AL 25V 47U M 5*11.5 TP		R512	D-0323271604	RES CH 1/2W 270 J 2010
	C904	D-1432309507	CAP AL 25V 47U M 5*11 TP		R511	D-0341046101	RES CH 1/10W 2.4K F 0805
	C425	D-1432309605	CAP AL 25V 470U M 10*16 TP		R511	D-0341046102	RES CH 1/10W 2.4K F 0805
	C434	D-1432309605	CAP AL 25V 470U M 10*16 TP		R511	D-0341046104	RES CH 1/10W 2.4K F 0805
	C425	D-1432309607	CAP AL 25V 470U M 10*16 TP		R514	D-0341048101	RES CH 1/10W 3.3K F 0805
	C434	D-1432309607	CAP AL 25V 470U M 10*16 TP		R514	D-0341048102	RES CH 1/10W 3.3K F 0805
	C407	D-1432315005	CAP AL 50V 1U M 5*11 TP		R514	D-0341048104	RES CH 1/10W 3.3K F 0805
	C410	D-1432315005	CAP AL 50V 1U M 5*11 TP		R401	D-0341049101	RES CH 1/10W 3.32K F 0805
	C416	D-1432315005	CAP AL 50V 1U M 5*11 TP		R401	D-0341049102	RES CH 1/10W 3.32K F 0805
	C407	D-1432315007	CAP AL 50V 1U M 5*11 TP		R401	D-0341049104	RES CH 1/10W 3.32K F 0805
	C410	D-1432315007	CAP AL 50V 1U M 5*11 TP		R405	D-0341497101	RES CH 1/10W 3.09K F 0805
	C416	D-1432315007	CAP AL 50V 1U M 5*11 TP		R405	D-0341497104	RES CH 1/10W 3.09K F 0805
	C511	D-1432317005	CAP AL 50V 3.3U M 5*11 TP		R906	D-0343100101	RES CH 1/10W 10 J 0805
	C511	D-1432317007	CAP AL 50V 3.3U M 5*11 TP		R907	D-0343100101	RES CH 1/10W 10 J 0805
	C419	D-1432321705	CAP AL 100V 10U M 6.3*11 TP		R908	D-0343100101	RES CH 1/10W 10 J 0805
	C419	D-1432321707	CAP AL 100V 10U M 6.3*11 TP		R909	D-0343100101	RES CH 1/10W 10 J 0805
	C402	D-1850125201	CAP PP DP 50V 1KP J TP5		R910	D-0343100101	RES CH 1/10W 10 J 0805
	C402	D-1850125206	CAP PP DP 50V 1KP J TP5		R911	D-0343100101	RES CH 1/10W 10 J 0805
	C417	D-1860406201	CAP PP DP 100V .01U G TP5		R912	D-0343100101	RES CH 1/10W 10 J 0805
	C405	D-1950103101	CAP MY DP 150V 5.6KP J TP5		R906	D-0343100102	RES CH 1/10W 10 J 0805
	C405	D-1950103104	CAP MY DP 150V 5.6KP J TP5		R907	D-0343100102	RES CH 1/10W 10 J 0805
	C404	D-1950201101	CAP MY DP 150V 2.2KP K TP5		R908	D-0343100102	RES CH 1/10W 10 J 0805
	C404	D-1950201104	CAP MY DP 150V 2.2KP K TP5		R909	D-0343100102	RES CH 1/10W 10 J 0805
	C509	D-1950212101	CAP MY DP 150V .1U K TP5		R910	D-0343100102	RES CH 1/10W 10 J 0805
	C509	D-1950212104	CAP MY DP 150V .1U K TP5		R911	D-0343100102	RES CH 1/10W 10 J 0805
	C406	D-1950219101	CAP MY DP 150V 3.3KP K TP5		R912	D-0343100102	RES CH 1/10W 10 J 0805
	C406	D-1950219104	CAP MY DP 150V 3.3KP K TP5		R906	D-0343100104	RES CH 1/10W 10 J 0805
	<b>DIODE</b>				R907	D-0343100104	RES CH 1/10W 10 J 0805
	D409	D-2010011407	DIO FRD 1A 400V D41		R908	D-0343100104	RES CH 1/10W 10 J 0805
	D415	D-2010011407	DIO FRD 1A 400V D41		R909	D-0343100104	RES CH 1/10W 10 J 0805
	D406	D-2010101401	DIO FRD 1A 400V D41		R910	D-0343100104	RES CH 1/10W 10 J 0805
	D407	D-2010101401	DIO FRD 1A 400V D41		R911	D-0343100104	RES CH 1/10W 10 J 0805
	D401	D-2010992007	DIO FRD 1A 1000V		R912	D-0343100104	RES CH 1/10W 10 J 0805
	ZD402	D-2030020305	DIO ZEN 0.5W 4.94-5.20V LL-34		R407	D-0343102101	RES CH 1/10W 1K J 0805
	D414	D-2050011001	DIO SI 1A 100V D41		R423	D-0343102101	RES CH 1/10W 1K J 0805
	D502	D-2050011001	DIO SI 1A 100V D41		R428	D-0343102101	RES CH 1/10W 1K J 0805
	D414	D-2050011011	DIO SI 1A 100V D15		R505	D-0343102101	RES CH 1/10W 1K J 0805
	D502	D-2050011011	DIO SI 1A 100V D15		R903	D-0343102101	RES CH 1/10W 1K J 0805
	<b>TRANSISTOR</b>				R407	D-0343102102	RES CH 1/10W 1K J 0805
	Q416	D-2100067006	TR 250V 50mA TO-92 hfe=50min		R423	D-0343102102	RES CH 1/10W 1K J 0805
	<b>COIL</b>				R428	D-0343102102	RES CH 1/10W 1K J 0805
	L901	D-2921020100	CORE BEAD 3.5*1.2*6 T/R		R505	D-0343102102	RES CH 1/10W 1K J 0805
	L902	D-2921020100	CORE BEAD 3.5*1.2*6 T/R		R903	D-0343102102	RES CH 1/10W 1K J 0805
	<b>RESISTOR</b>				R407	D-0343102104	RES CH 1/10W 1K J 0805
	R460	D-0313100001	RES CH 1/4W 10 J 1206		R423	D-0343102104	RES CH 1/10W 1K J 0805
	R460	D-0313100002	RES CH 1/4W 10 J 1206		R428	D-0343102104	RES CH 1/10W 1K J 0805
	R460	D-0313100004	RES CH 1/4W 10 J 1206		R505	D-0343102104	RES CH 1/10W 1K J 0805
	R465	D-0313102001	RES CH 1/4W 1K J 1206		R903	D-0343102104	RES CH 1/10W 1K J 0805
	R465	D-0313102002	RES CH 1/4W 1K J 1206		R406	D-0343103101	RES CH 1/10W 10K J 0805
	R465	D-0313102004	RES CH 1/4W 1K J 1206		R424	D-0343103101	RES CH 1/10W 10K J 0805
	R438	D-0313202001	RES CH 1/4W 2K J 1206		R466	D-0343103101	RES CH 1/10W 10K J 0805
	R439	D-0313202001	RES CH 1/4W 2K J 1206		R470	D-0343103101	RES CH 1/10W 10K J 0805
	R438	D-0313202002	RES CH 1/4W 2K J 1206		R501	D-0343103101	RES CH 1/10W 10K J 0805
	R439	D-0313202002	RES CH 1/4W 2K J 1206		R502	D-0343103101	RES CH 1/10W 10K J 0805
	R438	D-0313202004	RES CH 1/4W 2K J 1206		R406	D-0343103102	RES CH 1/10W 10K J 0805
	R439	D-0313202004	RES CH 1/4W 2K J 1206		R424	D-0343103102	RES CH 1/10W 10K J 0805
	R436	D-0313225002	RES CH 1/4W 2.2M J 1206		R466	D-0343103102	RES CH 1/10W 10K J 0805
	R444	D-0313225002	RES CH 1/4W 2.2M J 1206		R470	D-0343103102	RES CH 1/10W 10K J 0805
	R436	D-0313225004	RES CH 1/4W 2.2M J 1206		R501	D-0343103102	RES CH 1/10W 10K J 0805
	R444	D-0313225004	RES CH 1/4W 2.2M J 1206		R502	D-0343103102	RES CH 1/10W 10K J 0805
	R510	D-0313228001	RES CH 1/4W 2.2 J 1206		R406	D-0343103104	RES CH 1/10W 10K J 0805

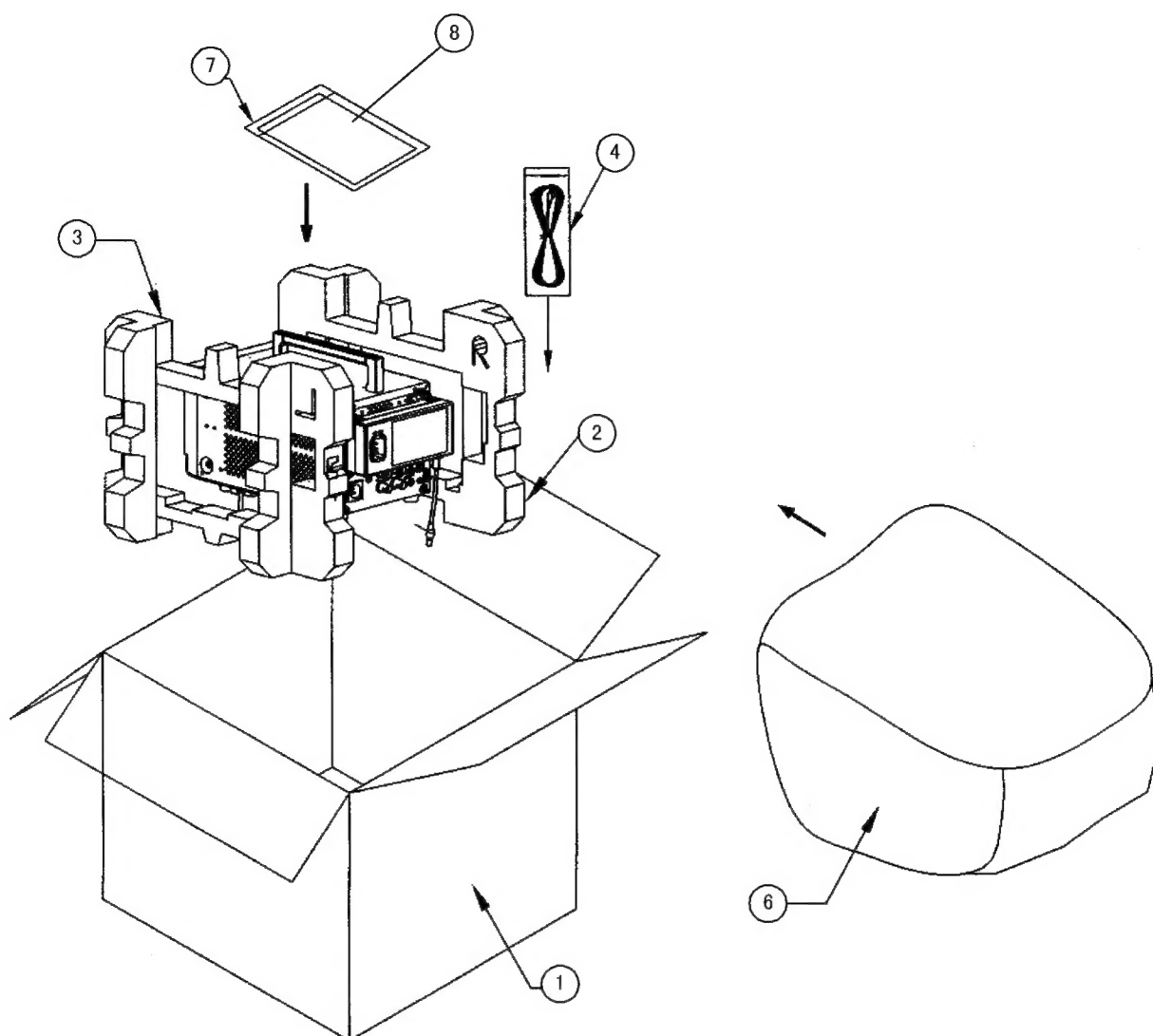
△	SYMBOL NO.	PART NO.	DESCRIPTION	△	SYMBOL NO.	PART NO.	DESCRIPTION
	<b>RESISTOR</b>				<b>RESISTOR</b>		
	R424	D-0343103104	RES CH 1/10W 10K J 0805		R426	D-0343332104	RES CH 1/10W 3.3K J 0805
	R466	D-0343103104	RES CH 1/10W 10K J 0805		R427	D-0343333101	RES CH 1/10W 33K J 0805
	R470	D-0343103104	RES CH 1/10W 10K J 0805		R427	D-0343333102	RES CH 1/10W 33K J 0805
	R501	D-0343103104	RES CH 1/10W 10K J 0805		R427	D-0343333104	RES CH 1/10W 33K J 0805
	R502	D-0343103104	RES CH 1/10W 10K J 0805		R509	D-0343363102	RES CH 1/10W 36K J 0805
	R431A	D-0343104101	RES CH 1/10W 100K J 0805		R509	D-0343363104	RES CH 1/10W 36K J 0805
	R432	D-0343104101	RES CH 1/10W 100K J 0805		R422	D-0343434101	RES CH 1/10W 430K J 0805
	R437	D-0343104101	RES CH 1/10W 100K J 0805		R422	D-0343434102	RES CH 1/10W 430K J 0805
	R555	D-0343104101	RES CH 1/10W 100K J 0805		R422	D-0343434104	RES CH 1/10W 430K J 0805
	R431A	D-0343104102	RES CH 1/10W 100K J 0805		R441	D-0343470101	RES CH 1/10W 47 J 0805
	R432	D-0343104102	RES CH 1/10W 100K J 0805		R456	D-0343470101	RES CH 1/10W 47 J 0805
	R437	D-0343104102	RES CH 1/10W 100K J 0805		R441	D-0343470102	RES CH 1/10W 47 J 0805
	R555	D-0343104102	RES CH 1/10W 100K J 0805		R456	D-0343470102	RES CH 1/10W 47 J 0805
	R431A	D-0343104104	RES CH 1/10W 100K J 0805		R441	D-0343470104	RES CH 1/10W 47 J 0805
	R432	D-0343104104	RES CH 1/10W 100K J 0805		R456	D-0343470104	RES CH 1/10W 47 J 0805
	R437	D-0343104104	RES CH 1/10W 100K J 0805		R513	D-0343471101	RES CH 1/10W 470 J 0805
	R555	D-0343104104	RES CH 1/10W 100K J 0805		R513	D-0343471102	RES CH 1/10W 470 J 0805
	R421	D-0343124101	RES CH 1/10W 120K J 0805		R513	D-0343471104	RES CH 1/10W 470 J 0805
	R507	D-0343124101	RES CH 1/10W 120K J 0805		R408	D-0343472101	RES CH 1/10W 4.7K J 0805
	R421	D-0343124102	RES CH 1/10W 120K J 0805		R409	D-0343472101	RES CH 1/10W 4.7K J 0805
	R507	D-0343124102	RES CH 1/10W 120K J 0805		R419	D-0343472101	RES CH 1/10W 4.7K J 0805
	R421	D-0343124104	RES CH 1/10W 120K J 0805		R469	D-0343472101	RES CH 1/10W 4.7K J 0805
	R507	D-0343124104	RES CH 1/10W 120K J 0805		R503	D-0343472101	RES CH 1/10W 4.7K J 0805
	R414	D-0343152101	RES CH 1/10W 1.5K J		R506	D-0343472101	RES CH 1/10W 4.7K J 0805
	R425	D-0343152101	RES CH 1/10W 1.5K J		R518	D-0343472101	RES CH 1/10W 4.7K J 0805
	R462	D-0343152101	RES CH 1/10W 1.5K J		R519	D-0343472101	RES CH 1/10W 4.7K J 0805
	R414	D-0343152102	RES CH 1/10W 1.5K J 0805		R408	D-0343472102	RES CH 1/10W 4.7K J 0805
	R425	D-0343152102	RES CH 1/10W 1.5K J 0805		R409	D-0343472102	RES CH 1/10W 4.7K J 0805
	R462	D-0343152102	RES CH 1/10W 1.5K J 0805		R419	D-0343472102	RES CH 1/10W 4.7K J 0805
	R414	D-0343152104	RES CH 1/10W 1.5K J 0805		R469	D-0343472102	RES CH 1/10W 4.7K J 0805
	R425	D-0343152104	RES CH 1/10W 1.5K J 0805		R503	D-0343472102	RES CH 1/10W 4.7K J 0805
	R462	D-0343152104	RES CH 1/10W 1.5K J 0805		R506	D-0343472102	RES CH 1/10W 4.7K J 0805
	R434	D-0343184101	RES CH 1/10W 180K J 0805		R518	D-0343472102	RES CH 1/10W 4.7K J 0805
	R434	D-0343184102	RES CH 1/10W 180K J 0805		R519	D-0343472102	RES CH 1/10W 4.7K J 0805
	R434	D-0343184104	RES CH 1/10W 180K J 0805		R408	D-0343472104	RES CH 1/10W 4.7K J 0805
	R402	D-0343203101	RES CH 1/10W 20K J 0805		R409	D-0343472104	RES CH 1/10W 4.7K J 0805
	R402	D-0343203102	RES CH 1/10W 20K J 0805		R419	D-0343472104	RES CH 1/10W 4.7K J 0805
	R402	D-0343203104	RES CH 1/10W 20K J 0805		R469	D-0343472104	RES CH 1/10W 4.7K J 0805
	R476	D-0343220101	RES CH 1/10W 22 J 0805		R503	D-0343472104	RES CH 1/10W 4.7K J 0805
	R476	D-0343220102	RES CH 1/10W 22 J 0805		R506	D-0343472104	RES CH 1/10W 4.7K J 0805
	R476	D-0343220104	RES CH 1/10W 22 J 0805		R518	D-0343472104	RES CH 1/10W 4.7K J 0805
	R467	D-0343221101	RES CH 1/10W 220 J 0805		R519	D-0343472104	RES CH 1/10W 4.7K J 0805
	R467	D-0343221102	RES CH 1/10W 220 J 0805		R431	D-0343473101	RES CH 1/10W 47K J 0805
	R467	D-0343221104	RES CH 1/10W 220 J 0805		R475	D-0343473101	RES CH 1/10W 47K J 0805
	R472	D-0343222101	RES CH 1/10W 2.2K J 0805		R904	D-0343473101	RES CH 1/10W 47K J 0805
	R472	D-0343222102	RES CH 1/10W 2.2K J 0805		R905	D-0343473102	RES CH 1/10W 47K J 0805
	R472	D-0343222104	RES CH 1/10W 2.2K J 0805		R431	D-0343473102	RES CH 1/10W 47K J 0805
	R468	D-0343223101	RES CH 1/10W 22K J 0805		R475	D-0343473102	RES CH 1/10W 47K J 0805
	R471	D-0343223101	RES CH 1/10W 22K J 0805		R904	D-0343473102	RES CH 1/10W 47K J 0805
	R557	D-0343223101	RES CH 1/10W 22K J 0805		R905	D-0343473102	RES CH 1/10W 47K J 0805
	R901	D-0343223101	RES CH 1/10W 22K J 0805		R431	D-0343473104	RES CH 1/10W 47K J 0805
	R468	D-0343223102	RES CH 1/10W 22K J 0805		R475	D-0343473104	RES CH 1/10W 47K J 0805
	R471	D-0343223102	RES CH 1/10W 22K J 0805		R904	D-0343473104	RES CH 1/10W 47K J 0805
	R557	D-0343223102	RES CH 1/10W 22K J 0805		R905	D-0343473104	RES CH 1/10W 47K J 0805
	R901	D-0343223102	RES CH 1/10W 22K J 0805		R474	D-0343512101	RES CH 1/10W 5.1K J 0805
	R468	D-0343223104	RES CH 1/10W 22K J 0805		R474	D-0343512102	RES CH 1/10W 5.1K J 0805
	R471	D-0343223104	RES CH 1/10W 22K J 0805		R474	D-0343512104	RES CH 1/10W 5.1K J 0805
	R557	D-0343223104	RES CH 1/10W 22K J 0805		R461	D-0343562101	RES CH 1/10W 5.6K J 0805
	R901	D-0343223104	RES CH 1/10W 22K J 0805		R504	D-0343562101	RES CH 1/10W 5.6K J 0805
	R411	D-0343243101	RES CH 1/10W 24K J 0805		R461	D-0343562102	RES CH 1/10W 5.6K J 0805
	R473	D-0343243101	RES CH 1/10W 24K J 0805		R504	D-0343562102	RES CH 1/10W 5.6K J 0805
	R411	D-0343243102	RES CH 1/10W 24K J 0805		R461	D-0343562104	RES CH 1/10W 5.6K J 0805
	R473	D-0343243102	RES CH 1/10W 24K J 0805		R504	D-0343562104	RES CH 1/10W 5.6K J 0805
	R411	D-0343243104	RES CH 1/10W 24K J 0805		R508	D-0343684101	RES CH 1/10W 680K J 0805
	R473	D-0343243104	RES CH 1/10W 24K J 0805		R508	D-0343684102	RES CH 1/10W 680K J 0805
	R420	D-0343274101	RES CH 1/10W 270K J 0805		R508	D-0343684104	RES CH 1/10W 680K J 0805
	R902	D-0343274101	RES CH 1/10W 270K J 0805		R412	D-0343752101	RES CH 1/10W 7.5K J 0805
	R420	D-0343274102	RES CH 1/10W 270K J 0805		R412	D-0343752102	RES CH 1/10W 7.5K J 0805
	R902	D-0343274102	RES CH 1/10W 270K J 0805		R412	D-0343752104	RES CH 1/10W 7.5K J 0805
	R420	D-0343274104	RES CH 1/10W 270K J 0805		R410	D-0343822101	RES CH 1/10W 8.2K J 0805
	R902	D-0343274104	RES CH 1/10W 270K J 0805		R410	D-0343822102	RES CH 1/10W 8.2K J 0805
	R418	D-0343302101	RES CH 1/10W 3K J 0805		R410	D-0343822104	RES CH 1/10W 8.2K J 0805
	R418	D-0343302102	RES CH 1/10W 3K J 0805		R556	D-0343824101	RES CH 1/10W 820K J 0805
	R418	D-0343302104	RES CH 1/10W 3K J 0805		R556	D-0343824104	RES CH 1/10W 820K J 0805
	R426	D-0343332101	RES CH 1/10W 3.3K J 0805		R403	D-0393471601	RES CH 3/4W 470 J 2010
	R426	D-0343332102	RES CH 1/10W 3.3K J 0805				



△	SYMBOL NO.	PART NO.	DESCRIPTION	△	SYMBOL NO.	PART NO.	DESCRIPTION
<b>CAPACITOR</b>				<b>DIODE</b>			
C901	D-1511542102	CAP MC CP 50V 470P J COG 0805		D416	D-2040010204	DIO SW 0.2A 75V LL-34	
C901	D-1511542103	CAP MC CP 50V 470P J COG 0805		D417	D-2040010204	DIO SW 0.2A 75V LL-34	
C901	D-1511542109	CAP MC CP 50V 470P J COG 0805		D418	D-2040010204	DIO SW 0.2A 75V LL-34	
C403	D-1511545102	CAP MC CP 50V 1KP J COG 0805		D501	D-2040010204	DIO SW 0.2A 75V LL-34	
C403	D-1511545103	CAP MC CP 50V 1KP J COG 0805		<b>TRANSISTOR</b>			
C403	D-1511545109	CAP MC CP 50V 1KP J COG 0805		Q401	D-2140017001	TR 40V 0.2A SOT23	
C431	D-1512454102	CAP MC CP 50V .01U K X7R 0805		Q406	D-2140017001	TR 40V 0.2A SOT23	
C433	D-1512454102	CAP MC CP 50V .01U K X7R 0805		Q407	D-2140017001	TR 40V 0.2A SOT23	
C906	D-1512454102	CAP MC CP 50V .01U K X7R 0805		Q408	D-2140017001	TR 40V 0.2A SOT23	
C907	D-1512454102	CAP MC CP 50V .01U K X7R 0805		Q410	D-2140017001	TR 40V 0.2A SOT23	
C908	D-1512454102	CAP MC CP 50V .01U K X7R 0805		Q417	D-2140017001	TR 40V 0.2A SOT23	
C909	D-1512454102	CAP MC CP 50V .01U K X7R 0805		Q418	D-2140017001	TR 40V 0.2A SOT23	
C910	D-1512454102	CAP MC CP 50V .01U K X7R 0805		Q501	D-2140017001	TR 40V 0.2A SOT23	
C911	D-1512454102	CAP MC CP 50V .01U K X7R 0805		Q502	D-2140017001	TR 40V 0.2A SOT23	
C912	D-1512454102	CAP MC CP 50V .01U K X7R 0805		Q503	D-2140017001	TR 40V 0.2A SOT23	
C913	D-1512454102	CAP MC CP 50V .01U K X7R 0805		Q505	D-2140017001	TR 40V 0.2A SOT23	
C431	D-1512454103	CAP MC CP 50V .01U K X7R 0805		Q510	D-2140017001	TR 40V 0.2A SOT23	
C433	D-1512454103	CAP MC CP 50V .01U K X7R 0805		Q401	D-2140017002	TR 40V 0.2A SOT23	
C906	D-1512454103	CAP MC CP 50V .01U K X7R 0805		Q406	D-2140017002	TR 40V 0.2A SOT23	
C907	D-1512454103	CAP MC CP 50V .01U K X7R 0805		Q407	D-2140017002	TR 40V 0.2A SOT23	
C908	D-1512454103	CAP MC CP 50V .01U K X7R 0805		Q408	D-2140017002	TR 40V 0.2A SOT23	
C909	D-1512454103	CAP MC CP 50V .01U K X7R 0805		Q410	D-2140017002	TR 40V 0.2A SOT23	
C910	D-1512454103	CAP MC CP 50V .01U K X7R 0805		Q417	D-2140017002	TR 40V 0.2A SOT23	
C911	D-1512454103	CAP MC CP 50V .01U K X7R 0805		Q418	D-2140017002	TR 40V 0.2A SOT23	
C912	D-1512454103	CAP MC CP 50V .01U K X7R 0805		Q501	D-2140017002	TR 40V 0.2A SOT23	
C913	D-1512454103	CAP MC CP 50V .01U K X7R 0805		Q502	D-2140017002	TR 40V 0.2A SOT23	
C431	D-1512454109	CAP MC CP 50V .01U K X7R 0805		Q503	D-2140017002	TR 40V 0.2A SOT23	
C433	D-1512454109	CAP MC CP 50V .01U K X7R 0805		Q505	D-2140017002	TR 40V 0.2A SOT23	
C906	D-1512454109	CAP MC CP 50V .01U K X7R 0805		Q510	D-2140017002	TR 40V 0.2A SOT23	
C907	D-1512454109	CAP MC CP 50V .01U K X7R 0805		Q401	D-2140017003	TR 40V 0.2A SOT23	
C908	D-1512454109	CAP MC CP 50V .01U K X7R 0805		Q406	D-2140017003	TR 40V 0.2A SOT23	
C909	D-1512454109	CAP MC CP 50V .01U K X7R 0805		Q407	D-2140017003	TR 40V 0.2A SOT23	
C910	D-1512454109	CAP MC CP 50V .01U K X7R 0805		Q408	D-2140017003	TR 40V 0.2A SOT23	
C911	D-1512454109	CAP MC CP 50V .01U K X7R 0805		Q410	D-2140017003	TR 40V 0.2A SOT23	
C912	D-1512454109	CAP MC CP 50V .01U K X7R 0805		Q417	D-2140017003	TR 40V 0.2A SOT23	
C913	D-1512454109	CAP MC CP 50V .01U K X7R 0805		Q418	D-2140017003	TR 40V 0.2A SOT23	
C443	D-1512458102	CAP MC CP 50V .1U K X7R 0805		Q501	D-2140017003	TR 40V 0.2A SOT23	
C506	D-1512458102	CAP MC CP 50V .1U K X7R 0805		Q502	D-2140017003	TR 40V 0.2A SOT23	
C902	D-1512458102	CAP MC CP 50V .1U K X7R 0805		Q503	D-2140017003	TR 40V 0.2A SOT23	
C905	D-1512458102	CAP MC CP 50V .1U K X7R 0805		Q505	D-2140017003	TR 40V 0.2A SOT23	
C443	D-1512458103	CAP MC CP 50V .1U K X7R 0805		Q510	D-2140017003	TR 40V 0.2A SOT23	
C506	D-1512458103	CAP MC CP 50V .1U K X7R 0805		Q409	D-2140018001	TR 40V 0.2A SOT23	
C902	D-1512458103	CAP MC CP 50V .1U K X7R 0805		Q411	D-2140018001	TR 40V 0.2A SOT23	
C905	D-1512458103	CAP MC CP 50V .1U K X7R 0805		Q415	D-2140018001	TR 40V 0.2A SOT23	
C443	D-1512458109	CAP MC CP 50V .1U K X7R 0805		Q409	D-2140018002	TR 40V 0.2A SOT23	
C506	D-1512458109	CAP MC CP 50V .1U K X7R 0805		Q411	D-2140018002	TR 40V 0.2A SOT23	
C902	D-1512458109	CAP MC CP 50V .1U K X7R 0805		Q415	D-2140018002	TR 40V 0.2A SOT23	
C905	D-1512458109	CAP MC CP 50V .1U K X7R 0805		Q409	D-2140018003	TR 40V 0.2A SOT23	
C437	D-1512466102	CAP MC CP 50V .033U K X7R 0805		Q411	D-2140018003	TR 40V 0.2A SOT23	
C442	D-1512466102	CAP MC CP 50V .033U K X7R 0805		Q415	D-2140018003	TR 40V 0.2A SOT23	
C437	D-1512466103	CAP MC CP 50V .033U K X7R 0805		<b>IC</b>			
C442	D-1512466103	CAP MC CP 50V .033U K X7R 0805		IC901	D-2610002111	IC 12-Bit Binary Counter SO-16	
C437	D-1512466109	CAP MC CP 50V .033U K X7R 0805		<b>OTHER</b>			
C442	D-1512466109	CAP MC CP 50V .033U K X7R 0805		△ F403	D-0869010102	FUSE FAST 1A 63V 1206	
<b>DIODE</b>				△ F404	D-0869010102	FUSE FAST 1A 63V 1206	
D404	D-2040010201	DIO SW 0.2A 75V MELF		△ F401	D-0869010202	FUSE FAST 1.5A 63V 1206	
D405	D-2040010201	DIO SW 0.2A 75V MELF		△ F402	D-0869010202	FUSE FAST 1.5A 63V 1206	
D416	D-2040010201	DIO SW 0.2A 75V MELF		<b>RESISTOR</b>			
D417	D-2040010201	DIO SW 0.2A 75V MELF		R416	D-0123689822	RES MOF 1/2W .68 J SMALL	
D418	D-2040010201	DIO SW 0.2A 75V MELF		R517	D-0143150822	RES MOF 2W 15 J SMALL	
D501	D-2040010201	DIO SW 0.2A 75V MELF		R417	D-0143220822	RES MOF 2W 22 J SMALL	
D404	D-2040010202	DIO SW 0.2A 75V MELF		R464	D-0143228822	RES MOF 2W 2.2 J SMALL	
D405	D-2040010202	DIO SW 0.2A 75V MELF		R443	D-0143568822	RES MOF 2W 5.6 J SMALL	
D416	D-2040010202	DIO SW 0.2A 75V MELF		<b>VR</b>			
D417	D-2040010202	DIO SW 0.2A 75V MELF		VR403	D-0605118006	RES VR VERT 1/4W 5M M	
D418	D-2040010202	DIO SW 0.2A 75V MELF		VR505	D-0606105004	RES VR VERT 500K T	
D501	D-2040010202	DIO SW 0.2A 75V MELF		VR402	D-0606108002	RES VR VERT 100K T	
D404	D-2040010203	DIO SW .3A 75V MELF		VR501	D-0606108002	RES VR VERT 100K T	
D405	D-2040010203	DIO SW .3A 75V MELF		VR503	D-0606108002	RES VR VERT 100K T	
D416	D-2040010203	DIO SW .3A 75V MELF		VR504	D-0606108002	RES VR VERT 100K T	
D417	D-2040010203	DIO SW .3A 75V MELF		VR502	D-0606110004	RES VR VERT 200K T	
D418	D-2040010203	DIO SW .3A 75V MELF		VR401	D-0606203304	RES VR HORI 10K T KNOB	
D501	D-2040010203	DIO SW .3A 75V MELF		VR404	D-0606205004	RES VR HORI 500K T KNOB	
D404	D-2040010204	DIO SW 0.2A 75V LL-34					
D405	D-2040010204	DIO SW 0.2A 75V LL-34					

△	SYMBOL NO.	PART NO.	DESCRIPTION
<b>CAPACITOR</b>			
	C408	D-1142354401	CAP CD 1KV .01U M Z5U K110
	C408	D-1142354403	CAP CD 1KV .01U M Z5U K110
	C444	D-1200041001	CAP MO DP 50V 390P J COG TP R
	C444	D-1200041003	CAP MO DP 50V 390P J COG TP R
	C415	D-1401706827	CAP AL LD 16V 470U M 8*20
	C429	D-1401706827	CAP AL LD 16V 470U M 8*20
	C415	D-1401706837	CAP AL LD 16V 470U M 8*20
	C429	D-1401706837	CAP AL LD 16V 470U M 8*20
	C411	D-1401709207	CAP AL LD 25V 1KU M 12.5*25
	C428	D-1401709207	CAP AL LD 25V 1KU M 12.5*25
	C510	D-1401709207	CAP AL LD 25V 1KU M 12.5*25
	C411	D-1401709227	CAP AL LD 25V 1KU M 12.5*25
	C428	D-1401709227	CAP AL LD 25V 1KU M 12.5*25
	C510	D-1401709227	CAP AL LD 25V 1KU M 12.5*25
	C411	D-1401709237	CAP AL LD 25V 1KU M 12.5*25
	C428	D-1401709237	CAP AL LD 25V 1KU M 12.5*25
	C510	D-1401709237	CAP AL LD 25V 1KU M 12.5*25
	C504	D-1401709927	CAP AL LD 25V 330U M 8*20
	C504	D-1401709937	CAP AL LD 25V 330U M 8*20
	C424	D-1401712407	CAP AL LD 35V 220U M 8*20
	C424	D-1401712427	CAP AL LD 35V 220U M 8*20
	C424	D-1401712437	CAP AL LD 35V 220U M 8*20
	C418	D-1403021307	CAP AL LD 100V 100U M 12.5*20
	C418	D-1403021328	CAP AL LD 100V 100U M 12.5*20
	C505	D-1430809205	CAP AL 25V 1KU M 13*20
	C505	D-1430809207	CAP AL 25V 1KU M 13*20
	C435	D-1431809405	CAP AL 25V 2200uM 12.5*25
	C435	D-1431809407	CAP AL 25V 2200U M 12.5*25
	C903	D-1432309505	CAP AL 25V 47U M 5*11.5 TP
	C414	D-1720112001	CAP MP DP 100V .1U J
	C501	D-1720112001	CAP MP DP 100V .1U J
	C502	D-1720112001	CAP MP DP 100V .1U J
	C503	D-1720112001	CAP MP DP 100V .1U J
	C507	D-1720112001	CAP MP DP 100V .1U J
	C508	D-1720112001	CAP MP DP 100V .1U J
	C421	D-1753157006	CAP MP DP 250V .82U J K120
△	C423	D-1873106006	CAP PP DP 1KV .01U J K115
△	C409	D-1873107006	CAP PP DP 1KV 0.015u J K115
<b>DIODE</b>			
	D402	D-2010141607	DIO FRD 3A 600V DO-201 AD
	D410	D-2010141607	DIO FRD 3A 600V DO-201 AD
	D411	D-2010831407	DIO FRD 3A 400V D201
	D413	D-2010831407	DIO FRD 3A 400V D201
<b>TRANSISTOR</b>			
	Q412	D-2100070010	TR 60V 3A 2045
△	Q404	D-2120025001	TR 400V 8A T220
△	Q414	D-2120025001	TR 400V 8A T220
	Q405	D-2120102007	TR 100V 2A T220
	Q413	D-2420023010	FET -55V -74A TO-220AB
<b>IC</b>			
	IC403	D-2500005001	IC REGU 5V 1A T220 3PIN
	IC402	D-2500007001	IC REGU 12V 1.0A T220
	IC501	D-2530004001	IC VERT DEFLECTION 2A 15PIN
	IC401	D-2530037005	IC TV HOVIZONTAL PROCESSOR 8P
	IC903	D-2540098006	IC BRIDGE DRIVER 20PIN
	IC904	D-2540098006	IC BRIDGE DRIVER 20PIN
	IC902	D-2610139060	IC EPROM 64K*8 150ns 28P
<b>COIL</b>			
	L401	D-2817000617	WIDTH COIL 8uH-35uH
△	T403	D-2817301117	X'FMR DRIVE
△	T402	D-2817306417	X'FMR SCAN CHOKE EI-25
	L402	D-2817600717	LINEAR COIL DR10*12 OA 4.5uH
<b>TRANSF</b>			
△	T401	D-2850002707	FLYBACK TRANSFORMER "5"
<b>OTHER</b>			
△		D-3000066500	POWER SWITCH POM94HM
		D-3020000300	IC SOCKET 28PIN
		D-3120035000	TRANSISTOR COVER
		D-3240191000	BUSHING NYLON46 94V-0
		D-3240191000	BUSHING NYLON46 94V-0

## PACKING



## PACKING PARTS LIST

△	REF. NO.	PART NO.	PART NAME.	DESCRIPTION
	1	D-3510313400	PACKING CASE	
	2	D-3500045200	END BLOCK CUSHION-R	
	3	D-3500045100	END BLOCK CUSHION-L	
△	4	D-3072000900	POWER CORD	
	6	D-3500904500	POLY BAG	FOR SET
	7	D-3500904600	POLY BAG	
△	8	D-5011030800	INST BOOK	LCT0505-001A
		D-5012110600	WARRANTY CARD	BT-51010-2
		D-5013002100	SERVICE INFORMATION	BT-20104A
		D-3209115000	RECORD KEEPING CARD	

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